small air forces observer

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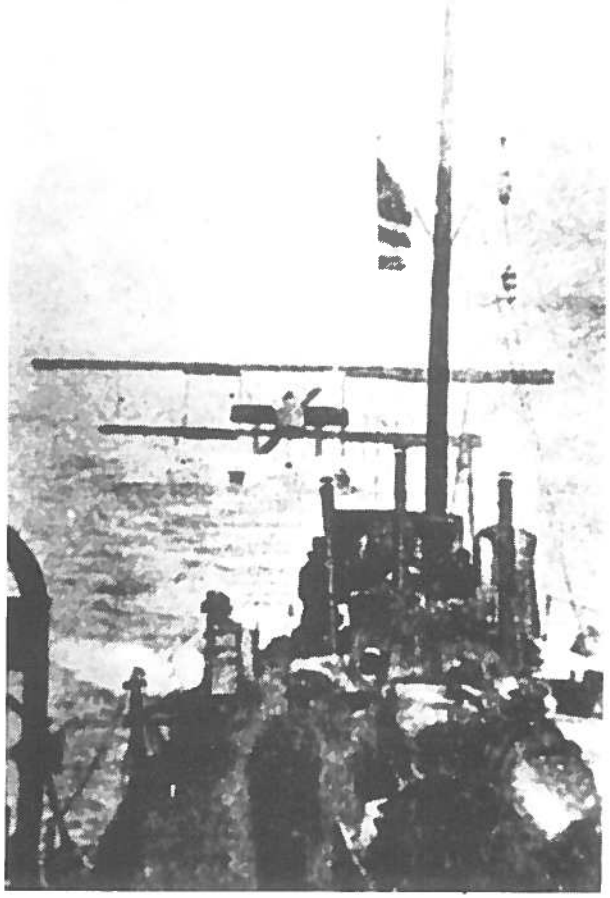
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AIRLINES OF THE FORMER USSR: PART 2 - RUSSIA, BELORUSSIA, MODAVIA, & UKRAINE
SQUADRONS OF THE ISRAELI AIR FORCE 1942-1992: PART 3 - SQNS 113-118
MEXICAN TEZIUTLAN PRIMARY TRAINER
THE NEW EUROPE IN THE SKIES
BALKAN WAR MISADVENTURE

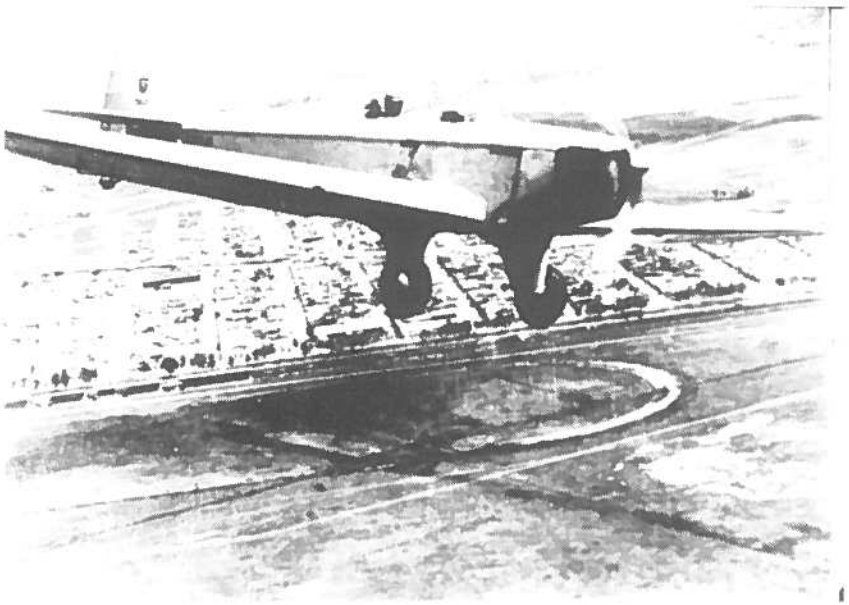
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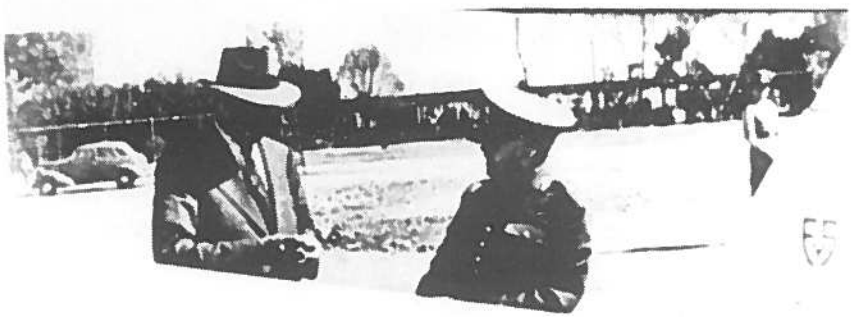


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SMALL AIR FORCES OBSERVER

The Newsletter of the Small Air Forces Clearing House

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SAFO EDITORIAL POLICY: The purpose of the SAFCH is to "promote interest in the history and modeling of the aircraft of the smaller countries". In support of this goal, the SAFCH encourages international cooperation in researching aviation history, both military and civil, from all periods of time, and for all the smaller countries. In return for this support, members are asked to submit occasional progress reports for publication in the SAFO. While the final results should appear in the most prestigious publication possible, it is requested that the SAFCH be mentioned (with address) in the article and that SAFO be afforded the opportunity of reprinting the material. Article published in SAFO can be reprinted provided permission of the author is obtained and the SAFO is identified in the reprint.

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INFORMATION FOR AUTHORS: Manuscripts may be submitted in any form; authors whose first language is not English may submit a rough translation of the text and the editorial office will put it into good English. Authors using a computer should send the manuscript on disc. Photo should be black and white prints although color prints can be used. If you want any photos returned, please mark "Return" on the back. All art work must be ready for printing. The layout should be such than when a page is reduced (if necessary) the drawing should fit into the 7.5 inch by 10 inch working area of the final page. Art work that does not fit this requirement will have to be cut and pasted to fit; no problem, but things might not look exactly as you want them to look. All work for the SAFO is voluntary and no payment can be made for published material.

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LOST MEMBERS: Anyone knowing the whereabouts of the following 'lost' SAFCH members please inform the editorial office (last know address included): Alain La Pierre, PO Box 2102 2102A, Les Delicias, Maracay, Venezuela; Michael Parr, #124 101 Tabor Blvd., Prince George, B.C. Canada; Richard Harrison, "Halcyon", RD 3, Box 3639A. Stroudsburg, PA; Ellis Estes, 5 W. Glebe Rd., Alexandria, VA. Gary Lepinski, 3311 32nd Ave. S, Minneapolis, MN 55406.

EDITORIAL: This issue of SAFO, the second issue of 1993, should have been published in April. However, extra duties at work, i.e. the job I get paid for doing, have put me two months behind schedule. As a consequence, the number of letters, kits, decals, books, etc. received since the last SAFO was published is considerably greater than normal (five months of input instead of three months). Therefore, the regular departments are about 60% longer than usual. This, unfortunately, leaves less room for articles. The space for articles is further reduced by the large number of photos that have the be used in this issue (eight pages instead of four pages). For the readers, I hope that the increased number of photos and reviews will partially make up for the decrease in the number of feature articles. For the authors who manuscripts have had to be delayed, I hope that you will understand the reason why your article does not appear in this issue.

As a consequence of my agonizing over the delay in publication, wife suggested that I re-evaluate my publishing schedule taking into account the cyclic nature of my teaching duties. We determined that, if the SAFO publishing schedule was slipped two months, the peak working load in preparing the magazine would fall during the slack period of my teaching quarters. Therefore, beginning with this issue the issues of SAFO will be dated June, September, December, and March. "Not to worry!" you'll still get four issues in 1993. The only problem I can foresee is that your renewal notice will come with the December issue when you are dead-broke from Christmas. If you remember to ask Santa Claus to put a ten-dollar bill in your stocking for your SAFO subscription, this should not be a major problem.

COVER COMMENTS: The MiG-23 on the cover displaying the newly-adopted Bulgarian national roundel exemplifies the rapid changes taking place in Eastern Europe, the Balkans, and the states of the former USSR as new air forces are formed and old ones cast off the discredited symbols of the past. Not since the end of WWII has anything similar been seen. SAFCH members have been supplying letters and photos documenting these changes and this information is collected in an article that begins on page 47. My sincerest apologies to BLUE RIDER for borrowing the title "The New Europe in the Skies" from their "New Europe" series of decals (see page 54 for a review of this new series), but there just doesn't seem to be a more appropriate phrase. (Photo by Stephan Boshniakov via Kim Margosein.)

AUSTRALIA

AUSTRALIAN PLASTIC MODELLERS ASSOCIATION (APMA, PO Box 51, Strathfield, NSW 2135; 4 issues sea mail A$27; air mail A$30).
Summer '92 (28 pages) "DC-2 Conversion in 1:72" 6 pages including construction drawings and 6 side-view drawings (RAAF & Finland). "Modelling Spanish FFGs in the Gulf" 4 pages including 2 photos and a page of drawings. "RAF Buccaneers in the Gulf" 6 pages including 4 photos and a 2-page scale drawing. "A Pair of Hurricanes" one page with two side-view drawings (Belgium & Romania). "Seahawk Colour Schemes" 3 pages including 2 photos, assorted views, and 3 side-view drawings. "Spitfire on Floats" 4 pages including 1/48- and 1/72-scale drawings and 4 side-view drawings. "Yak-3: The Kit Reviewed" 2 pages including 3 side-view drawings.
Autumn '93 (sic) (28 pages) "PR Lockheed Lightnings" 5 pages including 6 side-view drawings (French, Chinese, & RAAF) and drawings of 7 different camera arrangements. "Arme de l'Air Colours: After the Armistice" 2 pages including 6 side-view drawings (North Africa and Indo China). "Modelling the Hawker Sea Fury FB 11" 5 pages including kit reviews and 7 side-view drawings (RAN & Burma). "High Speed Spitfire" one page including 2 side-view drawings. "ARDU and 2 FTS PC-9As" 2 pages including one 3-view and 3 side-view drawings. "Iberian Air War: Douglas Aircraft in Spain" 2 pages including 3 side-view drawings (DC-1 & -2). "Potez 54 Series in Spain" 2 pages including 3-side-view drawings. "More Hurricanes" 1/2 page with 2 side-view drawings (Rhodesia & Iran).

NEWS AND VIEWS (IPMS NEW SOUTH WALES, PO Box 637, Broadway, NSW 2007; 4 issues A$30.00 air mail).
9-2 (26 pages) "A-26 Invader" 12 pages including 11 photos (mostly 'pin ups') and 8 side-view drawings (USAF in Korea and France). "Piper L-4 Cub" 6 pages including 15 side-view drawings (RAAF, Dutch Antiles, Indonesia, & Thailand). "FW-190 Nightfighters" 3 pages including 6 side-view drawings.

AUSTRIA

OFH NACHRICHTEN (Oesterrichishe Flugzug Historiker, Pfenninggeldgasse 18/2/14, A-1160, Wien).
4/92 (32 pages) "Messerschmitt Bf-108 Taifun" 2 pages including one photo and side-view drawings of 'OE-TKA'. "Die Geschichte des Jagdgeschwaders II" 4 pages including 5 photos (Austrian Fiat CR-20 & CR-32). "Lampich L 9/2 Spatz" 2 pages including 4 photos.
1/93 (32 pages) "Flieger der Ostfront: Alexander Kazakow" 11 pages including 6 photos, 3 side-view drawings (Morane Saulnier N, Nieuport 11, & Nieuport 17), and list of Russian 'Aces'. "Dreadnought No.1" 2 pages with one photo (but no drawings). "Oeffag C Prototyp" 2 pages with photo and side-view drawings of 50.08.

BELGIUM

KIT (IPMS Belgium, Te Couwelaarlei 103 bus 21, B-1200 Deurne/Antwerp; 4 issues US $25 in cash, International Postal Money Order for 750 BF, or American Express IMO for US $25; add US $5 (or 120 BF) for airmail. Please specify French or Dutch edition.
#87 Automne 92 (50 pages) "The RF-84F Thunderflash in Belgian Service" 26 pages including 3 color photos, 28 b&w photos, 9 pages of drawings of color schemes, and table of individual aircraft histories. "History des Blindes dans l'-Armee Belge: 1er Parte" 5 pages including 2 photos and 1/48-scale drawings of Char FT-17 with different turrets.

BRAZIL

EM ESCALA (IPMS Brazil, Rua Arquias Cordeiro, 316 S/502, CEP 20770, Meier, RJ. Subscription is $10.00, but they prefer kits or accessories. Send to Antonio Pereira Linhares at the above address.)
4/92 (20 pages) "Sukhoi Su 25 No. 679 - Iraq 1989" 2 pages with drawings of camouflage scheme.

CANADA

RANDOM THOUGHTS (IPMS Canada, Box 626, Stn. B, Ottawa, Ontario K1P 5R7; 6 issues for US $20.00 in US $22.00 elsewhere).
22/4 (24 pages) Nothing of small-air-force interest.
22/5 (24 pages) "CH-135 Twin Huey" 12 pages including 20 photos of interior details and 4 photos of a/c (CAF, Italian Army, Canadian civil, & Canadian Coast Guard). "Twilight of the St. Laurents" 6-page ship article with 2 photos and scale drawings (It doesn't fly, but it sure is pretty.).

CHILE

MODELOGRAMA (IPMS-Chile, Casilla 2174, Santiago.)
#8 (24 pages) "El N.A. T-6 en el Paraguay" 2 pages including 4 photos. "Bon Voyage - Sikorsky" 2 pages including 5 photos and side-view drawings of ChAF S-55. "El SA-330 Puma y Super Puma" 2 pages including 2 photos and a side-view drawing of Chilean Navy AS-532 Cougar. "Boeing 707" 4 pages including 7 photos and 3-view drawings of ChAF 707-320C.

CZECH REPUBLIC

ZLINEK (Jaromir Stepan, P.S. 8, 763 14 Zlin 12). Text in English.
#2 (32 pages) "The T-38/F-5 Family" 15 pages including 7 color photos, 2 full-page color 4-view drawings (USN T-38A & North Vietnam F-5E), and 10(!) pages of scale drawings. "Su-11 Fishpot C" 8 pages including 8 b&w photos, a 2-page 4-view color drawing, and 2 pages of 1/72-scale drawings. "Mi-17, No. 0826, No. 1 Mixed Air Transport Regiment" 2 pages including 3 color photos and drawings of color scheme of '0826' with colorful "mouth" decoration. "FW-58 Weihe" 3 pages including 4 photos of Luftwaffe a/c, 'CC+AJ' that crashed landed near a Czech village on 6 May 1944.

DENMARK

NYT (IPMS Denmark, c/o Bjorn Jensen, Rosenvaegets Alle 6, 2100 Kobenhavn 0; 4 issues for 90 Dkr surface, 100 Dkr airmail). Each issue includes two-page English summary.
#58 (30 pages) Non-Standard F-16 Schemes" 3 pages including drawings of RDAF F-16 in various unauthorized graffiti and paint schemes. "Republican Aircraft in the Spanish Civil War: Part 1" 4 pages including 3 pages of color schemes (I-16, SB-2, I-152) with captions in English and Humbrol color guesses. "F9F Panther in Argentine Navy Service" 2 pages including a full-page drawing. Four photos of Czech Su-25.
#59 (30 pages) "Supermarine Seafire: Part 2" 8 pages of the Griffon-engine versions including side-view drawings of Mks. XV, 17, 45, & 46; 3-view drawing of FR 47; and color schemes for 7 a/c. "Republican Aircraft in the Spanish Civil War: Part 2" 3 pages with color schemes for Letov 231, Grumman GE23, Bristol Bulldog, Hawker Fury, Gipsy Moth, Dragon Rapide, Boeing P26, Dewoitine 501/510, & Potez 540.

ENGLAND

IPMS MAGAZINE (Ernie Lee, 51 Ball Road, Hillsborough, Sheffield, South Yorkshire S6 4LZ. 6 issues for £18.00 (approximately $36.00. US subscription agent: Wise Owl Publications, 4314 West 238th St., Torrance, CA 90505; since exchange fluctuates write Joe for current rates).
6/92 (24 pages) "Modelling the Battle of Britain Memorial Flight: Part 1" 4 pages including 6 photos and 3 side-view drawings (Hurricane & Spitfire XIX). "'Sparrowshooters' - The T-26 and Relatives" 4 pages including 4 photos and 1/76-scale drawings. "Sea Venom FAW 22" 5 pages including 6 photos, construction drawings, & one color-scheme drawing. "The Elegant Deathtrap: Fairey's Battle" 4 pages including 3 photos, drawings showing extensive corrections to the Airfix kit, and 3 drawings of color schemes.

PLASTIC KIT CONSTRUCTOR (PAMAG (Publications) Ltd., 3 Lowfield Court, Old Forge Business Park, Sark Road, Heeley, Sheffield, S2 4HG; 4 issues £ 18.00 approximately $34.00. In USA/Canada order from J.J. Daileda, 4314 West 238th St., Torrance, CA 90505; since exchange fluctuates write Joe for current rates).
#33 (28 pages) "Avro Lincoln B Mk I" 1/144-scale drawings. Lots of kit reviews (1/72 Hughes Nightfox, 1/72 B-29, 1/72 Ju-88A-4, 1/48 Bell AH-1W, 1/48 Ju87B-2/R, 1/32 Mosquito Mk IV, 1/72 Sea Fury T.20, 1/28 Fokker Dr.1, 1/32 Nieuport Delage Sesquiplane Racer, 1/72 Fokker F-27 Friendship, 1/72 Short C-23A Sherpa, 1/48 Spad VII, 1/72 Caproni Ca-3, 1/48 Gloster Grebe, 1/72 He-219A-0, 1/48 Grumman F3F-3, 1/72 Lippisch Li DM1, 1/72 Junkers J1, 1/39 Wright Flyer, & 1/72 AV-8B Harrier.

FINLAND

MALLARI (IPMS Finland, PL 798, 00101 Helsinki 10; 6 issues $20.00, no check accepted due to the high redemption costs).
6/92 (24 pages) "Junkers G-24" 9 pages including 15 photos (mostly of Finnish 'K-SALC' on floats). Photo: Finnish Fairchild 24 'FD-1'.
1/93 (16 pages) "Airspeed A.S.51 Horsa" 4 pages including 6 photos on RAF machines. Photo: Finnish Pembroke.

GERMANY

MITTEILUNGEN (IPMS Germany, Bergengruenstrass 5-7, D-1000 Berlin 38; 12 issues DM 60.00 Europe, DM 65.00 USA, DM 70.00 Japan, DM 75.00 Australia).
1/93 (32 pages) "Die Luftwaffe der Tito-Partsanen" 4 pages including 4 photos (Fizir FP-2, Benes-Mraz Be-51, & Do-17E) and 3 side-view drawings (Breguet 19, Polikarpov Po-2, & Fieseler Fi-167). "Rumanischer Fi-156 Storch" 3 pages including 4-view drawings of a/c in Romanian roundels(!).
2/93 (32 pages) "D4Y1 Judy in 1/48" 5 pages.

GREECE

NEA (IPMS-Greece, PO Box 79167, 175 05 Amfithea, Athens) 4 issues $25.00 for first year, $20.00 for next year. Includes English summary.

3/92 (32 pages) "With the Gods of Olympia" 4 pages including one color photo and 7 b&w photos of a specially painted F104G. "Junkers G-24he: The First Greek Civil Transport Aircraft" 4 pages including 2 photos and 3 pages of drawings of a/c in both civil and military color schemes. "Ace's Quartet F84G Thunderjets" 5 pages of drawings of a/c from the Greek acrobatic team. Photos: Greek MS-230 & F-84F.

4/92 (32 Pages) "Noratlas in the Hellenic Air Force: Part 1" 7 pages including 5 photos and two 2-page camouflage schemes (port, starboard, & top view drawings). "Hellenic Army Fighting Vehicles: M-59" 10 pages including 16 photos, 1/35-scale drawings, and 5-view drawing of camouflage scheme. "Hellenic Centaurs" 7 pages including 10 photos. Color post-card: Greek C-47 'KJ960'.

HUNGARY

AERO HISTORIA, Budapest Pf. 61. 1631.

October '92 (64 pages) "Hungarian Night Fighters" 17 pages including 9 photos Bf-110 & Me-210), 5 side-view drawings (Bf-110), and 2 maps. "Hungarian AF Caproni Ca-101" 4 pages including 2 photos and 3-view drawing. The Last Hungarian Ju-88" 2 pages including 2 photos. "The Romanian V.DIvision in 1919 over Hungary" 10 pages including 11 photos.

ITALY

JP-4 (JP-4, CP 1550, 50100 Firenze; L 27.000 Europe, L 30.000 elsewhere).

12/92 (98 pages) Color photos: Air Ukraine Tu-154M '85700'; Maldive S-61N '8Q-HUM' of Hummingbird Helicopters; Croatia Airlines Citation 'RC-BP?'; Chilean AF A-37Bs; UN An-32 in Yugoslavia; and Tunisian AF AB-412 'L82 604'. "Flugplatz Emmen" 6 pages including 10 color photos of Swiss a/c at the Flight Experimental Center. "Voglia di Fulcrum" 8 pages including 7 photos. "Gli Angeli di Brooklyn" 5 pages including 6 color photos of Coast Guard HH-65A Dolphin. "Open Day a Grossenhain" 1 pages including 4 color photos (Soviet MiG-27, An-2, Mi-24, An-22). L'-Armata Fantasma" 2 pages including 6 color photos (German MiG-21 & MiG-23).

1/93 (98 pages) Color photos: Chinese F-7; German RF-4E, Canadian CT-133; and Russian Mi-26, UN Bell 212, Spanish C-130 somewhere in Yugoslavia. "The Diary of Col. Ivlev" 8 pages including 10 color photos (Afghan MiG-17 and Soviet MiG-25 & 31). "In the Skies of Romania" 5 pages including 8 color photos (MiG-29, MiG-23, MiG-21, IAR 93, Il-28, Mi-17, IAR 99, & Yak-52) all carrying Romanian roundels. "SAIDE: Italian Wings for Egypt" 6 pages including 9 b&w photos (SM-95, G-212, & C-47) and color side-view drawing of SM-95 in Egyptian civil markings. "Nuovo Trainer per l'USAF" 7 pages on the Slingsby Firefly including cutaway drawing and 8 color photos (Royal Hong Kong Auxiliary AF)

2/93 (98 pages) Color photos: Ukrainian MiG-29UB & Canadian CF-5A. B&W photo: Colombian Tucano. "Sorprese in Somalia" 3 pages including 13 color photos of abandoned a/c of the Somali AF (P-166DL-3, SF-260, G-222, AM-94, P-148, BN-2A, AB-212, An-24, MiG-15UTI, MiG-17, MiG-21U, & MiG-21MF). [Editor's note: Great diorama subjects.]

NETHERLANDS

MODELBOUW IN PLASTIC (IPMS-Nederland, Fonteinkruid 5, 3137 WL Vlaardingen.)

1/92 (36 pages) "Operation Granby" 7 pages including 17 photos and 3 side-view drawings of RAF Jaguars and Tornados in Desert Storm. "Sukhoi Su-7 Fitter" 11 pages including 11 photos, 5 3-view (top, port, & starboard views) drawings (one Indian & 4 Czech), a page of sketches on modeling a 2-seat version. "F-104G Starfighter Sharkmouth" 2 pages including 4 photos of Dutch a/c. "Roofhert" 2 pages with 3 photos and 3-view drawings of Czech Mi-24 with sharkmouth.

POLAND

AERO TECHNIKA LOTNICZA (Bartycka 20, 00-716 Warszawa 36. 12 issues US $32.00.)

11/92 (44 pages) "Me-262" 16 pages including 7 photos, 1/72-scale 5-view drawing, 1/72-scale side-view drawings of variants (8), 3 pages of sketches of details, a 2-page cutaway drawings, 5 side-view drawings (one Czech AF), 2 color side-view drawings, and a cover painting. "Farnborough '92" 5 pages including 15 color photos. "Malowanie PZL P.11" 5 pages including 4 photos and drawings of one Polish & Romanian P-11's. Photos: Lublin R-XIIID.

12/92 (44 pages) "Mitsubishi J2M Raiden" 14 pages including 3 photos, 9 scale side-view drawings of variants, 2 pages of 1/72-scale drawings, 6 side-view drawings, 2 color side-view drawings, one color painting, and numerous tables. "Polish Mi-24W" 4 pages including 8 color photos, 6 b&w photos, and 2 pages of scale & color scheme drawings. "Atlas Cheetah" 2 pages including scale 3-view drawing. "Jak-141" one page with 7 color photos of a/c in Russian markings.

1/93 (44 pages) "F-16 Fighting Falcon" 17 pages including 8 b&w photos, 6 color photos, 7 pages of 1/72-scale drawings (F-16A, YF-16, F-16B, AFTI/F-16, F-16/79, F-16CCV, F-16XL, F-16C, & F-16D), a 2-page cutaway drawings, color cover painting, 4 color side-view drawings (Dutch, Belgian, Israeli, & Pakistani). "Su-22M4" 3 pages with 17 color photos of underwing ordnance. "Sprawa Polskiego Udzialu" 6 pages on Poles in the Battle of Britain including 5 photos of Polish Hurricanes and a 3-page table listing aerial victories by Polish pilots including date, squadron, a/c serial and code letter, type of a/c claimed shot down, time, location, and evaluation including (when known) unit, codes, & site of crash of German a/c), and smaller tables comparing RAF & Polish claims to losses in German records. Color photos: Polish Su-20 & Bell 206, Ukrainian Boeing 737-400 'UR-GAA', and Turkmenistan Boeing 737-300 'EK-A001'.

FANATYK PLASTIKU (Marek Bronkowski, Slowackiego 4, Sandomierz.)

7/92 (28 pages) "MS-406" 2 pages including 1/72-scale 3-view drawings. "Bf-110" 2 pages including drawings of differences between versions. "Natter" 2 pages including 1/72-scale 3-view drawing and cutaway drawing. "RAF Phantoms" 3 pages with 10 side-view drawings. "TS-11 Iskra Detale cz.II" one page of sketches of cockpit panels. "Avia B.534 w Skali 1:72 wersje IV, III i II" 3 pages including 2 pages of drawings on converting the KP kit to an open-cockpit version. "Samolot Skolno-Bojowy I-22 Iryda" 3 pages including 1/72-scale 3-view drawings.

8/92 (32 pages) "Noorduyn Norseman" 4 pages including 1/72-scale 3-view drawing and 4 side-view drawings (USAAF, Norwegian civil, Norwegian AF, and Israeli AF). "Uzbrojenie Lotnicze Bylego ZSRR" 2 pages of drawings of 12 Soviet air-to-air missiles. "Modele Bf-109F-K" 2-page review of available kits. "F-86 Sabre" 4 pages with 20 side-view drawings (Italian, Dutch, Philippines, French, South Korean, Greek, Norwegian, Japanese, Thai, Honduran, & Venezuelan)."PZL P-11c" 2 pages on making an accurate model. "Samolot Asa" 2 pages including drawings of Soviet P-40E. "Mi-24D Italeri" 3 pages including 2 photos and sketches of details. "RWD-8 Jak Zywy" 3 pages including sketches on improving the 1/72-scale kit. "F-16A/B/C/D" 2 pages with sketches of modeling modifications.

SKRZYDLA W MINIATURZE (F.H.U. Modeltechnik, ul. Lobzowska 46a, 30-038 Krakow.)

#7 3/92 (36 pages) "RAF Markings 1939-45" 12 pages with drawings of camouflage patterns and national insignia. "IS-2 Mucha-Ter" 4 pages including 3 photos and 1/40-scale drawings. "US Navy Designation System 1946-62" 5 pages with tables. "Sochoj Su-25 'Anca'" one page with 4 photos. "Samolot Mysliwski La-9" 7 pages including 14 photos and 1/50-scale drawings of La-9 and ULa-9 2-seater.

SOUTH AFRICA

IPMS RSA MAGAZINE (IPMS South Africa, PO Box 84606, Greenside, 2043 Johannesburg)

2/92 (24 pages) "Me262 B-1A\I1 South Africa's Most Valuable Aviation Jewel" 4 pages including one photo and 3-view drawing of color scheme. "Bophuthatswana Defence Force Air Wing Pilatus PC-7 T-420" one page of drawings of color scheme. Photos: SAAF Mirage III R2Z with sharkmouth.

USA

Chine Lines (IPMS Seaplane SIG, c/o Bill Devins, 107 Troy Hills Rd., Whippany, NJ 07981. $8.00 for 4 issues).

#3 (Winter '93) "Heinkel's Hansa Heritage: Swedish S-Planes, and the Danish HM II" 7 pages including 17 1/100-scale side-view drawings of Heinkel's seaplanes from CC to He-5T and three 1/72-scale side-view drawings (and top and front views) of Danish HM II. "Piper L-4H Cub Floatplane" one-page review of KP kit. "Fokker Universal" one-page review of vacuform kit from VLE Models. "Widgeons Wild" one page of drawings for Thai and USCG a/c.

WWI AERO (15 Crescent Rd., Poughkeepsie, NY 12601; 4 issues $ 25.00 USA or $30 overseas).

#139 (146 pages) "The Wright Stuff: Part IVa" 10 pages including 9 photos and scale drawing of Model B. "Burgess: Part XI" 7 pages including 6 photos of the Model O and 3 photos and scale drawings of Model U Tractor Hydroplane. "Pfalz Dr.I" 11 pages including 15 photos and 4 pages of scale drawings. "Fokker DR.I" 8 pages of construction photos and drawings.

SKYWAYS (15 Crescent Rd., Poughkeepsie, NY 12601; 4 issues $25.00 USA or $30.00 overseas.).

#25 (84 pages) "Verville VCP-R/R-1" 14 pages including 15 photos and 4 pages of scale drawings. "Levasseur PL 9 to PL 401" 12 pages including 20 photos, 3-view drawing of PL 107, and table on all Levasseur a/c. "Steam Powered Travel Air" 4 pages including 5 photos. "More on X-Planes" 3 pages including 9 photos. "Navy WIngs" 7 pages with 14 photos of USN a/c. "Junkers Planes in Russia" 11 pages including 19 photos (F-13, Ju-20, Ju-21, G-24, PS-4, W-33W/PS-4). "Flying the Laird Super Solution" 3 pages including one photo. "Ford Tri-Motor" 2 pages including 3 photos. "Those In-

credible Gee Bees" 2 pages including 4 photos. "Cockpits: Beech B-17L/UC-43" 6 pages including photos of cockpit detail.

PRI-FLY (IPMS Washington DC, c/o Carol Fleckenstein, 13816 Choptank Ct., Centreville, VA 22020; 4 issues $8.00 for US, $9.00 all others).
83 (16 pages) "New England Antiques Number Three 'Irish Squadron' T-33's" 2 pages including side-view drawings of 2 Massachusetts ANG T-33.

AIR FORCE MONTHLY

August 1992: "Chinese Characters" 6 pages discussing codes of China, Taiwan, and Hong Kong including b&w photos of AFPLA H-6 (Tu-16), J-81 Finback A, Chengdu F-7H Airguard (MiG-21), J-811 Finback B, Nanchang CJ-6 (Yak-18), JJ-6/FT-6 (MiG-19UTI), Harbin SH-5, & Shannxi Y-8 (An-2);.CNAF AT-3B, Boeing B-727, & AIDC Ching Kuo; and Hong Kong Sikorsky S-76C & Slingsby T67M200's. "New Boys on the Block" 6 pages on Eastern Europe's new air forces including color photos of Slovenian AF Bell 412's, Soko S-342 Gazelle, & Augusta 109A; Croatian UTVA-75 & An-2; Ukranian MiG-29A & B; and close-ups of Croatian, Ukranian, & Slovenian national insignia; and b&w photos of Croatian UTVA-75 & MiG-21bis. Color photos: OV-10A Broncos for the Philippine AF; sharkmouth CT-133's of the Canadian AF; Polish AF Sokol helicopter; Greek AF Mirage F.1CG; Czech and Slovak AF L-39 Albatross & Su-25K Frogfoot; Spanish AF CASA-101 Aviojet. B&W photos: Czech & Slovak AF MiG-29 and Su-22.
September 1992: "Ten Years On" 6 pages on the current Argentine AF with color photos of Mirage IIICJ, A-4C Skyhawks, IA-63 Pampa, CH-47C Chinook, & Mirage IIIEA; and b&w photos of Mirage IIIBJ, Dagger, Mirage IIIEA, IA-58 Pucara, IA-50 Guarani, EMB-312 Tucano, & MS-760 Paris. "Flight into Sarajevo" 4 pages on relief flights into Bosnia including color photos of Italian AF G-222's and C-130's; and b&w photos of Belgian AF C-130H, Dutch Fokker F-27-300, & a Ukranian AF An-32 in UN markings. "MiG-25 Foxbat" 8 pages including color & b&w photos of Indian AF MiG-25U and MiG-25 R's. Color photos: Italian AF F-104G in Srtega Witch markings. B&W photos: Israeli AF F-4E with Rafael Popeye missiles; Ecuadorean Army IAI Arava 201; Dutch F-16A.
October 1992: "In Kamra" 4 pages on Pakistani aerospace industry at Kamra including b&w photos of Pakistan AF F-6 and A-5-III, and United Arab Emirates Mirage 5AD in various stages of repair; also Mushak 90 and NAMC K-8. "The Fighting Baz" 4 pages on Israeli use of the F-15 eagle including color and b&w photos of A, C, & D models. "Death of the Large Humpbacks" 2 pages with color photos of former East German Su-22 Fitters. "UNTAC's Air Assets" 3 pages on UN air activity in Cambodia including color photos of Royal Malaysian C-130H and b&w photos of Dutch Alouette in UN markings. Color photos: Italian AF Tornado ECR, Ukranian AF MiG-29B, Cambodian AF CH-133A. B&W photos: Israeli AF F-15D Eagle, Spanish AF Sikorsky S-76, Royal New Zealand AF Strikemaster Mk.88.
November 1992: "Facing the Future" 7 pages on South African AF today including color photos of T-6, C-47, King Air, and several Silver Falcon Atlas Impalas; and b&w photos of Harvards, Atlas Impalas, Super Dakota C-47, C-47, and DC-4. "Point Cook Airfield" one page including color photos of RAAF CT4A Airtrainer and Pilatus PC-9 of the Roulettes. Color photos: Greek F-104G in tiger markings, German RF-4E in Immelman markings, South Korean Hawk 100/67 and Westland Super Lynx Mk.99, Belgian F-16A in #2 Wing special markings, Hungarian MiG-21bis in an all yellow scheme & Mi-17 Hip, and Swiss Patrouille de Suisse Hunter in flight.
December 1992: "Facing the Future - Part 2" 6 pages including color photos of Mirage F-1CZ, Atlas Cheeteh, Pumas, Alouette III, and C-130B; and b&w photos of Mirage F-1CZ, Cheeteh E, Cessna 185, Alouette III, Frelon, Bosbok, Piaggio P.166 Albatross, Wasp, C.160 Transall, Boeing 707, and HS.125-400B. "Air War over Bosnia-Herzegovina" 7 pages including color photos of new Yugoslav MiG-21bis & Super Galeb; Bos-Herz Militia An-2 & Soko J-20 Kraguj; Croatian AF An-2 & MiG-21bis; and b&w photos of Yugoslav MiG-29UB, Mi-8, Orao IJ-22, Super Galeb, Alouette III, & Boeing 707; Serbian Republic SA-342 Gazelle. "USAF's Luftwaffe F-4 Squadron" 4 pages on German training squadron at Holloman AFB including color photos of German F-4s. Color photos: Belgian F-16, Bulgarian MiG-23MF & L-29 in new national markings, German Tu-154M. B&W photos: Italian Breguet Br-1150, Portuguese A-7P, Dutch F-16A, Czech and Slovak MiG-21MF.
January 1993: "Pakistan's Cradle of Fighter Pilots Chinese Style" 6 pages on Pakistan;s largest frontline air base including color photos of F-7P, F-7TP, FT-5, F-6, & F-7TP; and b&w photos of FT-5, F-7, & FT-6. "Malta's Air Squadron" 4 pages including color photos of Augusta-Bell AB-206A, Cessna O-1E Bird Dog, August-Bell 47B, Hughes 369HM, and a close-up of the new national insignia; and b&w photos of old Bell 47G, Libyan Alouette III, & SA-321 Super Frelon. "Winjeel Battlefield Commander" 4 pages on Aussie use of Winjeel trainer including several color and b&w photos. Color photos: Canadian AF Convair CC-109, Polish AF Mil Mi-8T & PZL-103TB Orlik, Colombian AF Fokker F-28. B&W photos: Maltese Bell 47, Greek F-4E.
Compiles by Don Van Winkle (SAFCH #968), 9302 Kings Cross, San Antonio, TX 78250.

AIR INTERNATIONAL

September 1992: "Aermacchi MB-339C" includes color photos of Royal New Zealand AF, United Emirates AF, Royal Malaysian AF, & Ghana AF MB-329. Color drawings: Kenyan AF Shorts Tucano T Mk.51, Brazilian AF Embraer T-27 Tucano, Argentine Embraer Tucano EMB-312. Color photos: Saab JAS 39 Gripen. B&W photos: Greek Coast Guard Socata TB-20 Trinidad & Cessna 172RG, Brazilian & Kenyan Shorts/Embraer Tucano.
October 1992: "Rooivalk: An Industry Comes of Age" Color and b&w photos of South African Atlas CHS-2 Rooivalk helicopter. "Cheeteh: Canard Fighter for the SAAF" color and b&w photos and cutaway drawing. "Veteran and Vintage: Preserved down Mexico Way" color photos of Mexican gate guardians (AF P-47, B-25, DC-3, AT-11, & T-28, and Navy DC-3). "Service Use for Italy's New Agile Attacker" including color and b&w photos of AMX in Italian AF markings. Color drawings: Italian AF AMX and Brazilian AF AMX-T. Color photos: Dutch AF F-16A 40th anniversary of 314 Sqd., Canadian AF CT-133 Silver Star, Hungarian AF MiG-23MF. B&W photos: Portuguese AF Cessna T-37C.
November 1992: "Aeroporias Stratu" includes color photos of Greek Army Boeing-Vertol CH-47C Chinooks, Augusta-Bell AB-205, Beech Super King Air 200, Augusta-Bell AB-206, & Cessna U-17A.
December 1992: "Front-Line Professionals with Yesterday's Aircraft" 6 pages on history and current status of the Albanian AF including color photos of MiG-21F-13 (Chinese F-7), MiG-19 (Chinese F-6), MiG-15bis (F-2), MiG-17 (F-4), MiG-15UTI (FT-2), MiG-17UTI (FT-5), Harbin H-5 (Il-28), Nanchang Type 61 (Yak-18), Y-5 (An-2), Il-14, & Mi-4A; and b&w photos of Yak-7P, Yak-18, Mi-1, & a USAF T-33A. Also included in this article is a list of aircraft used by the Albanian AF since 1951. "Vietnam Veterans" one page including 4 color photos of North Vietnamese UH-1H, F-5E, MiG-21US, & Nanchang CJ-6, and a list of aircraft in various Vietnamese museums. Color drawings: New Yugoslav Orao, Croatian MiG-21bis, Slovenian Bell 412SP, Serbian Krajina Militia Mi-8, and Croatian An-2. Color photos: Slingsby T67M200 Fireflies of the Royal Hong Kong Auxiliary AF, the tail of a Ukranian MiG-29. Bulgarian MiG-23Ub and L-29 Delfin in new roundels, Serbian Krajina Militia insignia and coat of arms on a SA-342L Gazelle, new Slovenian AF markings on tail of Bell 412. B&W photos: Guatemalan F-51D #336 gate guard.
January 1993: "Heinkel He-219" all Luftwaffe. Color photo: German RF-4E in special Immelman markings.
Compiles by Don Van Winkle (SAFCH #968), 9302 Kings Cross, San Antonio, TX 78250.

THE AIRCRAFT OF AEROFLOT IN THE NEWLY-INDEPENDENT STATES

Part II: Russia, Moldavia, Belorussia, and Ukraine.

Peter Batuev

[Editor's note: The first part of this series, The Baltic Republics, appeared in SAFO #65, January 1992. The third, and final part, covering Azerbaijan, Kazakstan, and Turkmenistan, will appear in the next issue of SAFO.]

Now a few words about the markings of aircraft in the states that maintain their civil aviation in Aeroflot. The company's name is present on all aircraft (either in Latin or Cyrillic script, big or small, on one side of the fuselage or both sides). The Aeroflot registration scheme was CCCP-AABBB, where the CCCP identifies the USSR, and the AA identifies the aircraft code (for instance, 86 for the Il-86, 85 for the Tu-154, 75 for the Il-18, 65 for the Tu-134, 42 for the Yak-42, etc.). On aircraft of some post-USSR states (Ukraine & Azerbaijan), the letter part of the registration was removed since the majority of states carried out only those painting changes that would involve a minimum of expenditure. As a rule, Aeroflot's double blue stripes remain along the fuselage, as do the fuselage colors - white above the stripes and grey below. The USSR's red flag on the fin is either converted into the national flag (Russia, Azerbaijan, Belorussia) or removed entirely (Moldavia).

An impressive painting scheme is carried by Ukrainian aircraft. Somehow, the Ukrainian government found the hard currency to have their aircraft repainted in the West. The nose and central fuselage are white. The aft part of the fuselage and the vertical fin are painted in the Ukrainian national colors; yellow and blue. The Ukrainian national symbol, a trident, modified to a "bird" shape is painted on a circle on the vertical fin.

Photos (on pages 67 & 68) by the author.

a. Close-up view of Russian Tu-134 carrying old USSR registration. The red flag on the fin has been replaced by the Russian flag (white/blue/red) with grey separating the white of the flag from the white of aircraft.

b. Russian Tu-134 with new registration.

c. Russian Il-76TD transport from Vakutia (Republic of Siberia). Only the numerical part of the registration remains. The inscription "Vakutavia" denoted the property of the state of Yakutia.

d. This Moldavian Tu-134 still carries the double stripes of Aeroflot and USSR registration. "Air Moldavia" is red; the national flag is green/yellow/red.

e. The Moldavian Tu-134 from the starboard side. "Aeroflot" and the symbol are blue and are carried only on this side.

f. Belorussian Tu-134. "Belarus" is red, the national flag (white/red/white) is on a wide blue stripe. "Aeroflot" and symbol are blue.

g. Ukrainian Yak-42. The over-painting of the USSR flag on the fin is noticeable.

h. Ukrainian Yak-42. "Air Ukraine", "Aeroflot", and "Yak-42" are black; registration is white; national flag is yellow and blue; tail is blue and yellow with blue, bird-shaped, Ukrainian "trident". The wings are grey.

Peter Batuev (SAFCH #1243), PO Box 154, 198302 St. Petersburg, Russia.

-wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-

[Editor's note: Many of you know of the outstanding publications by Patrick Laureau on the aircraft of the Spanish Civil War, most of which were written in French. Patrick now lives in Chile and works for the Chilean Air Force. He recently wrote with a proposition that should interest all SAFO readers especially those in the business of publishing.]

"I am looking for a partner for publishing high-quality, photo books on aviation subjects of interest to the enthusiast of the small air forces. The idea is to promote new authors and cover topics not previously covered. I propose to start with my 'Spanish Civil War in the Air' which Monogram has finally abandoned after seven-years of hesitation. This could be followed by books on Latin American air forces, beginning with the Chilean Air Force, of course. All topics are guaranteed to be of the highest level with regards to research and documentation.

"These books would be published in Chile where the printing quality is excellent (the best in Latin America) and the manpower costs are realtively low. A 64-page book, in color with a soft covers, all on quality glossy paper, would cost around US$ 10,000 for 3,000 copies."

Patrick Laureau (SAFCH #696), Conjunto El Alba, Rio Tolten 4813, Puente Alto, Santiago, Chile.

"I have some kits and books to sell or exchange. (Prices include sea-mail postage). Russian 1/72-scale, injection-molded kits: Polikarpov I-3 $7; Polikarpov R-5 $7; Polikarpov UT-2 $6; MiG-29 $10; Su-27 $12; G-11 $7; ANT-25 $12; Yak-6 $6; LaGG-3 $5; Yak-7/9 $5; Bi-1 $5; Yak-15 $5; MiG-21 $5; Po-2 (5 versions) $5. Lots of Novo kits $3-$20. Polish 1/72-scale, injection-molded kits: Lublin R-XIIId & -ter, PZL-24G; PZL-50 Jastrzab, PZL-7a, P-11c, RWD-5, RWD-6, Yak-1/1M, LWS-14 Czapla, Il-1/2m3, PZL-37A/B Los, Saunders Roe SR-53 ($5 each); TS-11 $7; Modern Soviet Aircraft Weapons $7. Polish 1/72-scale Vacuform kits: Yak-11, Yak-15, Yak-17, Yak-18, PZL-104 Wilga, LaGG-3, P-51B/C, Bf-109E, Yak-36, PZL-24G, P-40M, SIAI Dardo, P-39Q, PZL-130 Orlik, PZL I-22 Iryda, PZL-50 Jastrzab, LWS-3 Mewa, PZL-38, PZL-46, RWD-13, RWD-15, RWD-20, Me-263, PWS-15, Ki-61 Hien, CA-13 Boomerang ($5.00 each); LWS-4A Zubr $10. Polish 1/48-scale vacuform kits: PZL-46 Sum $10; LaGG-3 $3; Su-15 $15. 1/35-scale, injection-molded kits: Light Tank 7TP $10; Su-76 $20; Soviet Light Tank T-60 (1942) $10; ZIS-3 Red Army Anti-Tank Gun $10; 120mm Mortar & 4 Crewmen $7; Red Army Infantry Set #1 or #2 $5 each. 1/400-scale, injection-molded submarine kits: Polish Dzik & Urula and Soviet Type K, L, D, & SCH ($4 each). Polish Books: TBUs $3 each; Przeglad Konstrukcji Lotniczych #1 Su-22M, #2 Mi-24D, #3 I-22 Iryda, #4 F-117A, #5 B-24 Liberator, #6 MiG-29, #7 Su-27, #5 Boeing B-52, #9 MiG-23MF, #10 Tornado, #11 Mirage 2000, #12 Uzbrojenie Lotnicze, #13 F-15 Eagle, #14 SR-71 Blackbird ($8 each); Barwa #1 - #9 $3.30 each. Polish Paper Models 1/33-scale Maly Modelarz, GPM, Fly Model, Hobby Model, Modelcard, Gorman, Design, Cardplast; Russian Paper Models 1/48: MiG-29, Su-27, MiG-31, Yak-38, F-16, MiG-27, MiG-23, F-15.

"I need the following: Book: 'Japanese Aircraft of the Pacific War'; Kits: Revell 1/72-scale Hellen, Sally, Nick, Francis, Ginga, FW-200 (military); Monogram 1/48 scale B-29, C-47, B-24, B-25, B-17, B-26, P-38, P-61, Mosquito, A-10, Mi-24, MiG-29, F-14, F-15, A-18, F-5, Mirage 2000, F-8, F-101, F-102, F-105, F-106, F-111, AH-64, Cobra, F-100, B-58, F-20, AV-8B, Typhoon, Wildcat."

Bogdan Braniewski (SAFCH #802), PO Box 20, 05-075 Wesola near Warsaw, Poland. FAX /482/ 628 91 19 or /4822/ 37 65 54.

"I will be selling copies of Brian Bridgeman's **The Flyers, The untold story of British and Commonwealth airmen in the Spanish Civil War and other air wars from 1919 to 1940**, (Bridgeman and the Self-Publishing Assoc., Ltd.; Upton-upon-Severn. Worcs., UK; 1989, 255pp., illus., maps, biblio.), for $30.00 per copy, postpaid surface mail anywhere. Checks of money orders only; no cash or credit cards, please."

Tom Sarbaugh (SAFCH #497), 266 Lake Dr., Kensington, CA 94708-1132 USA.

"I am seeking information on the following types exported to the Baltic states. (1) Latvia: Savoia S-16ter, Svenska Aero licence-built Hansa-Brandenburg 47(S4)/Heinkel He-4, Fiat CR-1, Ansaldo A-300, and last-minute orders of Dornier Do-22. (2) Estonia: Smolik S-228E. (3) Lithuania: Smolik S-20, Ansaldo A-120, Fiat CR-20, and last-minute orders of Morane MS-406 and Bristol Blenheims for Lithuania.

"I would be glad to receive information on any of these type, or guidance where to seek it. Perhaps someone could refer me to the relevant Italian sources."

Moshe Bukhman (SAFCH #1277), Ha-Shoshanim 6/2, PO Box 3753, Carmiel 20100, Israel.

"Thank you for checking your files for information on tthe color schemes used by the Communist Air Forces in the Korean War. I know my interest is somewhat obscure, yet I am sure that somewhere there exists a source for this information beyond pilot reports and speculation. I am confident that the Chinese and North Koreans have files full of photos of their Korean-War era aircraft. My hopes is that one day they open these files to the world so that everyone can see the wild markings these Migs carried into battle. For example, Lt. Jim Thompson, a F-86F pilot, shot down a bare metal Mig-15 with a dragon painted along the length of the fuselage. I would like to see that dragon-decorated Mig! There are also reports of Mig-15's with the insignia of their home country. I find these

reports hard to believe given the fact that many of the satellite nations were flying Yak-11's, not Mig-15's during the 1950-1953 era.
"Any information our readers might provide, no matter how obscure, would be of great interest."
Charles Euripides (SAFCH #1286), 5340 Holmes Run Parkway, Suite 1610, Alexandria. VA 22304 USA.

"In 1992, I starting my own publishing business. The main subjects will be fighter aircraft and fighter aces, particularly from WWII and Korea. I am looking for contacts with other peole with the same interests. I hope that you will be able to help me."
Przemyslaw Skulski (SAFCH #739), ul. Trzebowianska 14, 54-153 Wroclaw, Poland.

"Wanted to buy: 'Of Struggle and Flight' by Karlis Irbitis; 'Letectvi + Kosmonautika' 11/89 & 12/90; 'Aeroarchiv: Avia B-534'; 'Plany Modelarskie: PZL P-24'; '55 Years of Yugoslav Aviation' by Radosavljevic and Milosevic, 1966; 'Van Glen Martin en Mustang' by Hugo Hooftmann; and 'Van Brick Tot Starfighter' by Hugo Hooftmann."
Pascal Faucard (SAFCH #571), 26 Avenue Raoul Aladenize, 18500 Mehun sur Yeure, France.

"I am a scale modeler with a particular interest in obtaining references for Korean War camouflage and markings for the Communist air forces. I have many of the more usual sources (Air Enthusiast, Squadron/Signal) which mention Eastern-European MiG-15s over North Korea. Do you know any references, either foreign or domestic, that give detailed descriptions and/or drawings or photos of such color schemes and markings?
"I have seen two photos of Chinese MiG-15s as well as several photos of a MiG-15 that defected in 1953. Now that the Cold War is over, I am certain that more references will be forthcoming. I am particularly intersted in reports of overall power blue MiG-15s as well as one particular color scheme which inxluded dark blue, powder blue, green and copper tan. Can our readers direct me to a reference on this subject?"
Charles C. Euripides (SAFCH #1286), 5340 Holmes Run Parkway, Suite 1610, Alexandria, VA 22304.

"Author/researcher seeks information on Mitsubishi F1M2 Pete. I am especially interested in first person experiences and possible small air force use. I have seen reference to use by the Royal Siamese Naval Air Force during WWII, but my documnetation on this is limited to Weal's "Combat Aircraft of WWII". Additionally, I am curious if there was any French or Chinese (or other) post-war useage. Lastly, I want to buy a copy of Maru Mechanic #20 on this aircraft."
Robert W. Tabb (SAFCH #1270), 735 Delaware Rd., Box 103, Buffalo, NY 14223.
[Editor's note: Drawings of a Pete in Indonesian markings appears both in SAFO #30 and LETECTVI+KOSMONAUTKA #2 1977. The colors are a worn dark green over grey with a red stripe on the float; red "AI-" on the vertical fin; red/white roundels (divided on a diameter) on the fuselage (red on top), above the top wing, and below the bottom wing (red facing forward); and a red/white rudder (divided horizontally with red on top). The SAFCH files reveal no other small air force use.]

"Selling hugh aviation magazine collection including Air Action, Air Fan, & la Fana d'Aviation (French); Flugzeug & Modell Fan (Germna); Aero Modellismo; Koku-Fan; Air Display, AEQ, Air Enthusiast/Air International/RAF Flying Review, Air Force International, Air Force Monthly, Airframe, Aviation & Marine International, PAM, SAM, & Warplanes (U.K.); plus numerous U.S. issues and assorted odds & ends. Send large SASE for list."
L.L. Swanson (SAFCH #654), 1506 Lorraine Ave., Bellevue, NE 68005.

"I have a number of requested relating to small-air-force use of the **Bf-109E**: (1) I am curious to see a copy of the drawing of the POA Me-109 on the cover of the Hungarian book reviewed in the last SAFO. You said it looked quite a bit like the drawing I published in SAFO. A problem one runs into researching UFOs and other unexplained phenonena (such as the POA) is what seems to be corroborating evidence can often be traced back to the same source. I'd like to see if the drawing is similar to the one I used. (2) Does anyone have any photos or drawings of Me-109E's in Soviet service? I understand that they bought a few for evaluation before 6-41. (3) Ditto for Spanish 109E's. Does anyone have photos or drawings of them in post-civil war red-yellow-red roundels? (4) I know that during WWII at least one 109E was sent to the US for evaluation. Did it ever get painted in US markings? Again, photos or drawings would be appreciated."
Kim Margosein (SAFCH #104), 2813 E. 192nd St., Lansing, IL 60438.

"Can you help please. I have a problem with the Hobbycraft 1/48th scale Vampire Mk1 which I am finishing in Dominican Republic colours. The instructions are not all clear. On the drawing of the aircraft it shows the markings which the decal sheet call 'Early Markings'. However, I want to finish my model in the late markings which are given on the decal sheet, but there is no drawings of an aircraft carrying these markings on the instruction sheet. Can anyone help?"
Alex J.M. Ford, 143 Avocet Way, Langford Village, Oxofordshire, OX6 0YW England.
[Editor's note: Alex was referred to the SAFCH by Ernie Lee of the IPMS UK Technical Advisory Service. This is a good example of the type of cooperation the SAFCH attempts to foster, so I sure hope somebody can help. If you do send an answer to Alex, send a copy to me so it can be included in SAFO.]

"I am a collector of paper kits and plans of all types (ships and warships, tanks and armoured fighting vehicles, aircraft and warplanes) and I am keen to get in touch with other collectors. I have for disposal some of my surplus stock and have enclosed a list of paper kits and plans which are for sale or trade. The kits, made between 1972 and 1988 are US $15 each including air mail postage. The plans, superb large-scale aircraft plans printed in Poland, are US $40 each including air mail postage.
"My paper kit collection consists of over 250 kits from Russia, Poland, East Germany, and Romania covering all the mentioned-above subjects. I am presently importing approximately 30 different paper kits each month to increase my collection and I'm always keen to develop trades/sales.
"I also have A4-size color prints from Russia that I can reproduce and supply with or without superb plans. I currently have about 850 sets for aircraft. I also can provide an inexpensive plastic lamination of the color prints for anyone interested."
Richard Noakes (SAFCH #1302), Unit 5, 61 Troy Terrace, Daglish, Perth 6008 WA, Australia.
[Editor's note: If you would like a copy of Richard's lists, write directly to Richard. North American members can send an SASE (with two extra 1st class stamps to cover my copying cost) to the SAFCH editorial office.]

"I am currently trying to research details of the North American F-86 Sabre in the world's air forces, and I am having trouble finding much of substance in many instances. I am writing the SAFCH in the hope that you may be able to put me in touch with the right people. The 'trouble spots' are: Peru, Honduras, Turkey, Tunisia, Ethiopia, Burma, Bangladesh, Taiwan, and Republic of Korea.
"Any details of Sabres in service with the air forces of these countries would be very helpful, especially aircraft serial numbers, dates of service, and squadron/wing allocations. I will pay any expenses incurred."
Duncan Curtis, Aviation Historian and F-86 Specialist, 2 Melsome Rd., Lyneham, Witshire, Great Britain SN15 4QL.

"I am an aviation historian and artist working on a new book to be published on the Sabre; it's design and development, it's distribution to international air forces, and the aerobatic teams that flew them. I am looking for any contacts that might be able to help, especially any contacts in Turkey, Taiwan, South Korea, Philippines, Portugal, and Iran."
Michael A. Fox, 18321 Empire. East Detroit, MI 48021.

"FOR SALE: 142 issues of Scale Modeler (1966-1984) and around 60 issues of Air Classics (1975-1982). I also have for sale Maly Modelarz, Plany Modelarskie, Type Bronu i Uzbrojenie (TBU), Flieger Revue, and Letectvi. A full list is available upon request."
Wladyslaw Mykityn, os. Hutnicze 9/31. PL. 31-918 Krakow 28, Poland.

WANTED: Air International, February and March 1991.
Stephen Miller (SAFCH #342), 1637 Hugo Circle. Silver Springs, MD 20906.

"I am compiling an illustrated list of military aircraft insignia for publication in SAFO. I need infomration (illustrations, color data, or any other information) onthe markings used by the following present-day 'countries': Bermuda, Barrados, Costa Rica, Grenada, St. Vincent, Martinique, Guadeloupe, Trinidad, St. Thomas, Liberia, Namibia, Serra Leone, Swaziland, Lesotho, Venda, Transkei, Ciskei, Bophutatswana, Latvia, Lithuania, Slovenia, Croatia, Slovakia, Krajina, Bosnia, Belarus, Gerogia, Zazakhistan, Kyreyzstan, Macedonia, Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, Andoria, Bhutan, Burundi, Fiji, Manchuria, Qatar, & Suriname.If some of these countries have no military markings, I need to know this."
"William B. Shenk (SAFCH #599), 21957 Crescent Court, Framington Hills, MI 48335.

"I have a large number of aviation magazines, books, and items for sale including Aero Digest, Aviation, Flying Review International etc. Send SASE for list.
Leo Kohn (SAFCH #1187), 12740 Falcon Dr., Brookfield, WI 53005.

MOUTOUSSIS, MORAITINIS AND MUDDLE

R. D. Layman

[Author's note: Early in 1913, during the confusing later stages of the First Balkan War, there occurred an incident presaging developments that would profoundly change the nature of naval warfare. For the first time, a powered, heavier-than-air machine performed a maritime combat mission. The basic facts are well known: The aircraft was a Greek seaplane, its occupants were Greek officers, and the objects of their reconnaissance and bombing were Turkish. Beyond this, discrepancies and contradictions abound.

Inspired by John Cochrane's fine article in SAFO #62 on Balkan War aircraft, and emboldened by information recently supplied by August Blume, I decided to reopen this can of worms and see what wiggles out. In doing so, I will expose my ignorance in the hope that more knowledgeable SAFCH members will help.

My sources, in addition to the Cochrane article, are various 1912-13 issues of the British publication AIRCRAFT and THE AEROPLANE; the Turkish book "Havaclilik Tarihinde Turkler" (History of Turkish Aviation), hereafter cited as HTT; Vol. 1 of H. W. Wilson's "Battleships in Action"; William Green's "Wings of Helles" in Flying Review International, Vol. 25, No. 2, 1969; Michael Paris' "The First Air Wars - North Africa and the Balkans 1911-13" in the Journal of Contemporary History, Vol. 26, 1991; and a typescript history of the Royal Hellenic Air Force supplied to me by the Office of the Air Attache of the Greek Embassy in Washington (subsequently published in Aerospace Historian, Vol. 21, No. 3, September 1974 under the title "Greek Combat Aviation: An Official History" and hereafter cited as the Greek Official History, or GOH.]

The Mission

The aircraft was to proceed from an island in the Aegean Sea to reconnoiter units of the Turkish fleet sheltering in the Dardanelles, the straight flowing from the Sea of Marmora to the Aegean along the Gallipoli peninsula. Another task, perhaps secondary, was to drop bombs - on what, is disputed.

The Airmen

The pilot of the aircraft was Michael Moutoussis (the generally accepted spelling) whose rank is given variously as lieutenant or first lieutenant, one of four army officers who received flight instruction at the Henry Farman (1) school in France during the summer of 1912. These four formed the nucleus of the Greek air arm, under the command of a French volunteer aviation, Captain Bares. [Was this Edouard Bares, later commandant of the French air service in World War I?]

Moutoussis' companion, the man who probably actually dropped the bombs but was rarely mentioned in contemporary accounts, was a naval officer, Ariastides C. Moraitinis. His rank is generally given as ensign, which would indicate he was a simalophoros - a rank that can be interpreted as ensign, sub-lieutenant, junior lieutenant or acting lieutenant.

The Aircraft

It is also generally agreed - with exceptions to be noted later - that the aircraft was a Farman floatplane, and photographic evidence confirms this. But which type of Farman brothers' plane - a Henry or a Maurice? There is little to differentiate the two types from each other and the number and period of service of the two types and their variants are difficult to pin down.

Cochrane states that the first Greek aerial unit was formed on 1 September 1912 with four Henri (sic) Farmans, one of which was a floatplane that he implies was used for the Moutoussis-Moraitinis flight. The GOH, concurs on the number of aircraft and identifies them as 50-hp Farmans, but goes on to say the unit was re-equipped in November with 80-hp Farmans "which allowed the unit to carry the additional weight of an observer" - indicating the original four were single seaters. The Aeroplane of 23 January 1913 gives a roster of six 50-hp and one 80-hp Henry Farmans and three 70-hp Maurice Farmans as of 1 January. The same publication, in its 13 February 1913 issue, identifies the Moutoussis-Moraitinis plane as a Maurice Farman; other accounts in which the type in mentioned call it simply a Farman; the GOH does not identify the type at all.

If the GOH is to be believed, the aircraft could not have been the original Farman that Cochrane identifies as a floatplane, for it could not have carried two occupants. The GOH also casts doubt on the original configuration of the aircraft, stating that it was "a Greek plane ... modified for use as a hydroplane by the installation of floats on 24 January 1913".

That the aircraft was a Farman seems established beyond doubt, but, strangely, both Green and HTT call it an Astra that was given the name Nautilus. There was such a French seaplane in Greek service; The Aeroplane of 21 November 1912 reports that "The Astra hydro-biplane recently bought for the Greek Navy has now reached Athens and will be in use shortly. It is fitted with the bomb-dropping apparatus designed by Lieut. Scott." (2) On 28 December 1912, the publication stated the Astra "will be flown by M. Guinard, who has become attached to the Greek Naval service. It is stationed at the Isle of Lemnos."

Green says that two Astras were purchased and assembled at Mudros (the port and bay of the Aegean island of Lemnos).

The only Astra seaplane I have encountered was a twin-float tractor biplane bearing no resemblance whatsoever to a Farman pusher. What may be the only known photo of the Moutoussis/Moraitinis aircraft clearly shows a pusher of Farman configuration. However, the aircraft in a reproduction of this photo in HTT is identified as an Astra.

The mysterious Monsieur Guinard, who apparently was a French civilian, may have inadvertently been responsible for this confusion. The Aeroplane of 20 February 1913 reports he was in Paris as of that date, with a tale of having made "several reconnaissances over the Aegean Sea." The item continues: "On one occasion, while flying with a Greek officer as a passenger, his engine stopped and forced him to alight on the water. A heavy sea was running, and the back float was broken almost immediately after touching. He and his passenger had to remain on the aeroplane, with its tail under water, for two hours before being rescued."

This story is vague to an extreme. It fails to identify the type of aircraft, the "Greek officer", the date, the location of the accident, and the method of rescue. If, however, this incident really occurred and the aircraft was an Astra, it is easy to see how it could have become confused with the Moutoussis-

Moraitinis flight which likewise ended with a water touchdown and rescue.

The Date

With one exception, all sources, including Turkish, date the flight as 6 February 1913 (The Aeroplane gave it as the 7th in a February issue but corrected itself a few weeks later). The exception is Green, who states it was 24 January, the date on which the GOH says that the aircraft was converted to a floatplane.

It could be coincidence, but the discrepancy between 24 January and 6 February is exactly the 13 day difference between dates in the Gregorian calendar and the Julian calendar that was still in use by Greek and Turkey in 1913. The January date could have been enshrined in older Greek records and histories. (3)

Route and Duration

The most detailed contemporary account appeared in the Aeroplane of 6 March 1913. It states that Moutoussis took off about 0900 hours from Mudros Bay. The Greek destroyer "Velos" had left Mudros an hour earlier to track the flight as far as possible and to provide assistance if needed. The ship's earlier departure was to give Moutoussis time to circle the nearby island of Imbros; the purpose of this is obscure, but perhaps it was to aid in giving navigational bearings.

At 0910 hours, The Aeroplane's account continues, the aircraft was seen from the destroyer as Moutoussis passed over the eastern tip of Imbros and then vanished from sight to fly "towards the tongue of land which separated Nagara from the sea." The "Velos", steaming at 14 knots, then proceeded to an unidentified position four miles off the Turkish coast and hove to.

The "tongue of land" would be the Gallipoli peninsula, and Nagara Point is on the Asiatic side above The Narrows, which with a width of about three-quarters of a mile is the slimmest portion of the Dardanelles. It can, therefore, be assumed that Moutoussis flew roughly northeast before turning easterly to pass over the straight, but whether his route was over the peninsula or on its seaward side cannot be established. An earlier item in The Aeroplane (13 February 1913) reported his altitude averaged 4500 feet.

That publication's later account states that the aircraft, flying at more than 6000 feet, was seen from the "Velos" 40 minutes after the 0910 sighting. This would indicate a total flight time of about an hour. HTT says the flight lasted 40 minutes; Wilson gives an impossible duration of 2.5 hours.

A synthesis of all sources indicates the route, assuming the strait was crossed in the vicinity of Nagara, was then southeast over Canakkalke on the Asiatic side of The Narrows, then perhaps slightly northwest to pass over Maidos on the European side, and finally southeast for the return leg. However, it is possible that the easterly turn took the plane over Maidos first.

The aircraft was scheduled to return to Imbros, not Mudros [Why?], but instead came down at sea and was towed to harbor by the "Velos" -- whether to Imbros or Mudros is not stated.

The Results

The usefulness, if any, of the flight as a reconnaissance mission is impossible to determine. This aspect is described only vaguely. The Aeroplane: "... a successful reconnaissance." Aircraft: Moraitinis "was able to make observations.. that were far more valuable than he had expected." Wilson: Moutoussis "examined the Gallipoli Peninsula with a view to forcing the straits and reported it to look like one great military arsenal." GOH: "... the enemy Fleet was observed ..."

The reports of bombing mission are equally vaguely, and here the discrepancies become really wild. The targets have been described as ships, land installations, or both, and their reported locations vary widely.

The Aeroplane says Moutoussis "described two circles over the fleet and dropped four bombs, none of which too effect." Aircraft reports the plane "flew over Maidos ... and dropped four bombs on the arsenal there." Wilson says the aircraft "dropped four bombs over the ships ... but failed to obtain a hit." According to the GOH, "four small bombs" were dropped on "the Navy Yard."

The most interesting and most recent claim has been made by Cochrane who writes that "units of the Turkish fleet" having been found off Nagara, "four bombs were dropped, two landed on ships and two on land fortifications. Later that day. another three bombs were dropped but all fell harmlessly either on land or into the sea." Who dropped the later bombs is not stated, nor are their supposed targets; this claim is not borne out by any other source.

It is extremely improbable that any ships were hit; this would have been an event unique in naval and aero history and would have received a wide press.

What the GOH means by "Navy Yard" is puzzling; to the best of my knowledge, the nearest navy yard was at Constantinopole.

Equally baffling is the report in Aircraft that an "arsenal" at Maidos was the target. This town, north of Cannakkale on the opposite side of the strait, was the headquarters and probably the main encampment of the Turkish army corps defending the Gallipoli peninsula.

In the belief that those on the receiving end of bombs are more knowledgeable about were they fell and what they did, I am strongly inclined to accept the report given in HTT: "In the area of Gelibolu (Gallipoli) and Cannakkale bombs were dropped on our navy. Three of the four bombs fell into the water, the fourth hit an open field and opened a 15-cm wide (about 6 inches) crater." (4)

Gelibolu, in this context, must refer to the peninsula itself and not to the town of the same name further up the strait, so it is possible that the fourth bomb could have hit near Maidos, but Cannakkale seems far more likely.

I have never seen a description of the missiles dropped, but most aerial "bombs" of the period were standard hand grenades, weighing from a half pound to three pounds, usually fitted with fins or streamers for stability, and dropped by hand. Whatever those dropped from the Farman were, the diameter of the crater as described in HTT indicates they were explosively puny.

Accepting that the targets were warships, what vessels might they have been? The composition of the Turkish fleet in the Dardanelles that day is impossible to determine, but a few weeks earlier, according to Wilson, it had consisted of two old ex-German battleships, "Barbarossa" and "Torgut Reis", the cruiser "Messudieh', and from four to 13 torpedo boats and destroyers.

Another indeterminate is why Moutoussis came down on the sea instead of continuing to Imbros. Fuel exhaustion is unlikely for a flight that lasted no more than 40 to 60 minutes,

for Farmans of the period had an endurance of at least two hours.

HTT indicates, rather ambiguously, that the aircraft was disables by Turkish gunfire. Apparently it was fired upon. The Aeroplane reports that Turkish artillery opened an ineffectual fire" on the plane, and Aircraft states that Moutoussis "as he passed over the fleet ... saw flashes from the vessels' guns as they fired at him", but "his hydro-aeroplane was not hit."

Fire from the ships certainly would have been "ineffectual", for there was not a gun in the Turkish fleet that could have been elevated high enough to endanger an aircraft overhead. If the plane were hit, it was probably by rifle or machine-gun bullets; several British aircraft were struck by small-arms fire during the Dardanelles/Gallipoli campaign in 1915. But, in absence of any confirmation, this question must remian moot. The best guess is that Moutoussis ended the flight early because of some sort of engine failure.

Postscript

The flight had not an iota of influence on the conduct of the war, which in any case was winding down and would end formally on 30 May 1913. Its historical significance is as the first offensive action by an airplane against surface warships (5) and giving Moraitinis the little-known distinction of becoming the first serving naval officer to take part in a wartime combat mission by an airplane.

Moraitinis later became an aviator and early 1918 found him flying Sopwith Camels with Greek naval Flight H.2 based on Lemnos. He became commander of the Greek naval air service after the war, with the rank of ypoploiarkos (lieutenant commander), and was killed on 20 December 1920 when his plane crashed on a flight between Athens and Salonika.

[Author's note: Incidentally, several years ago I interviewed an ex-RNAS pilot whose life had been saved by Moraitinis in a dogfight over the Aegean. They met later, so I can claim to have shaken the hand of a man who shock the hand of the first Naval officer ever to take part in an aerial attack on warships. This shows how young naval aviation really is.]

Notes

(1) It was not until sometime in World War I that the spelling of the British-born Farman's first name metamorphosed from the English Henry to the French Henri. I have never seen an English-language, pre-WWI publication that used the French spelling.

(2) U.S. Army Lieutenant Riley E. Scott first demonstrated his bomb-release mechanism in the United Sates in 1911. He later won the Michelin bomb-dropping contest with it.

(3) Turkey changed to the Gregorian calendar in 1917 and Greece in 1925. If the January date is wrong (as I am now sure it is) I unfortunately perpetuated the error, relying on Green's authority, in my book "To Ascend from as Floating Base", published in 1979.

(4) I am grateful to fellow Great War Society member Hermann Zutraun for translations from "Havaclilik Tarihinde Turkler".

(5) The next such incident before World War I occurred in May 1913 during the Mexican civil war.

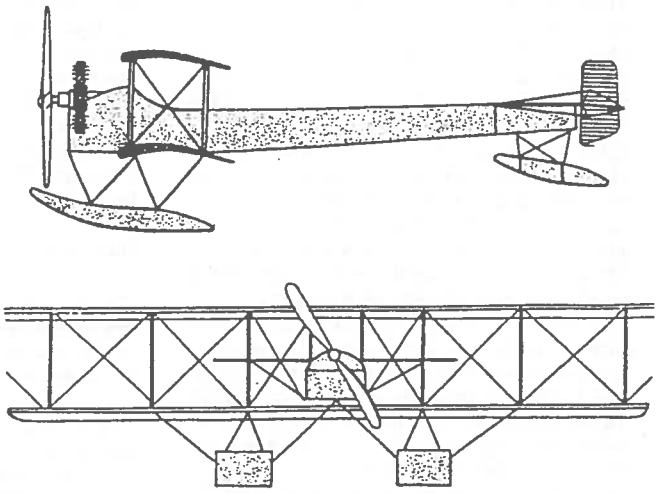
R. D. Layman (SAFCH #619), 50 Mohawk Ave., Corte Madera, CA 94925.

Photos (on page 36) via August G. Blume.

a. The Farman under tow by the Greek destroyer "Velos" after the flight of 6 February 1913.

b. Greek seaplane, apparently a Farman, date and location unknown. One of the first four Farmans acquired by Greece reportedly was a floatplane - this may be it.

An Astra floatplane, probably of the type that has been misidentified as the aircraft used for the Moutoussis-Moraitinis flight. These drawings originally appeared in a manual entitled "Aircraft of Belligerents in the Year 1914" published in 1918 by the U.S. Navy Gas Engine School; it was reprinted in 1971 by Flying Enterprises.



Salient geographical features mentioned in the accounts of the Moutoussis-Moraitinis flight. The map was drawn for this article by Stephen McLaughlin.



"Regarding the Caproni Bulgarski KB-2UT which appeared on the cover of SAFO #64: A poor photo of a KB-2UT in flight appears in the Bulgarian book 'Samoletostroeneto v Bulgaria'. An English-language version of this book, with increased photo content, has been underway for some time. The rough English text and the photos are ready, but money is the problem at the present time."
Tony Morris, Ashbourne House, March Gibbon, Bucester, Oxon OX6 0HW England.

"Grumman OV-1D Mohawks are fast disappearing from the US Army inventory with only about 90 left. The Oregon Army National Guard's 641st Military Intelligence Battalion retired their Mohawks on 1 October 1992. Two went to the 15th Military Intelligence Battalion at Fort Hood, Texas, and the rest went to the 224th M.I.Bn. at Savannah, Georgia.
"Also on 1 October 1992, the Department of the Army announced that Argentina will acquire some ten Grumman OV-1D Mohawks. Two departed on 9 December 1992, and five more will leave in February 1993. Six of these will come from the 224th M.I.Bn. at Savannah, and one will come from the 15th M.I.Bn at Fort Hood. These were sent to Grumman Aircraft in Stuart, Florida, for reconditioning before being sent to Argentina. In addition, the more OV-1Ds will be sent as spare aircraft for attrition replacements and spare parts.
They are all straight OV-1D models with photoreconnaissance capabilities. They will have no SLAR (side-looking airborne radar), IR (infrared), ELINT (electronic intelligence), or SIGINT (signal intelligence) equipment. This is the first foreign sale of the Mohawks which has been in the US Army inventory since 1959."
Terry Love (SAFCH #229), 9415 West 178th St., Lakeville, MN 55044 USA.

"The local aviation news is rather slow. One of the SAAF Impala squadrons disbanded in October 1992. At the final flypast ceremony, there was one aircraft painted in an albatross scheme. I will get drawings for you to carry in SAFO. The Museum of Military History has on display a fully restored Buccaneer in the original scheme. Are you interest in drawings? There are rumors of either PC-7 or 9's for the SAAF as a replacement for the Harvards. Cost dictates the PC-7, but the SAAF would like the PC-9 because of it's newer technology, i.e. the stepped cockpits."
Colin Burgess (SAFCH #402), PO Box 32759, Braamfontein 2017, South Africa.

"Embraer-Empresa Brasileira de Aeronautica S.A. today delivered to the Colombian Air Force the first seven in a batch of 14 EMB-312 Tucano trainers, plus two EMB-110P1A Bandeirante transports, ordered early this year. The remaining aircraft in the order will be delivered before the end of the month. The Tucano will be based at Apiay and operated alongside a fleet of piston-powered Beech T-34 mentor on basic/advanced flight training. The Bandeirante will be stationed in Bogota, the nation's capital, and mainly flown on VIP missions.
Ab-initio flying in the Colombian Air Force is conducted in the Cessna T-41 Mescalero. The upper portion of advanced flying and operational training are carried out in the Cessna T-37. With its outstanding performance and low operating and maintenance costs, the turboprop Tucano may similarly replace in the future both the T-34 and T-37 in the Colombian Air Force.
The Tucano is the world's best-selling turboprop military trainer with nearly 700 units sold and over 500 delivered to 14 air forces."
Embraer New Release, 10 December 1992.

"Enclosed (on page 55) is a photograph of a number of Lithuanian Gloster Gladiators. Although the photo is rather poor, it does show a number of interesting details. First, notice the Lithuanian Air Force insignia on the top surface of the upper wing. Also, note that the color of the wings seem to be darker than the rest of airplane. Could this be dark green? I doubt it. Aluminium dope reflects the sun differently at various angles. On one aircraft, you can barely see the rudder with part of the insignia; the rudder seems to be a darker color. How about the type of film used? I saw Lithuanian Gladiators several times and I remember them being aluminum overall. I have also talked to a Lithuanian Gladiator pilot, Mr. Numgaudas; he remembers the them being a "greyish" color. Unfortunately, he doesn't remember the placement of the insignia. The photo is from the collection of Mr. Peseckas."
David Dulaitis (SAFCH #913), 417 Preston Circle, Sunny Hills, FL 32428.

[Editor's note: Roger Eberle (SAFCH #358), of Switzerland, sent the article on the Balkan Wars (SAFO #64) to Harry Woodman in England. This is real international cooperation. Here is Harry's reply.]
"The following are my observations and corrections to the feature by John Cochrane: (1) The aeroplane shown at 'e' has now been positively identified as a Sommer 'Triplace' model 'R'. (2) It is known that the S-7 was sold to them by the Russo-Baltic Wagon Works in Petersburg. This aircraft was, however, not designed by Sikorsky who was Chief designer, but by his team led by G.P. Adler. The S-7 was a mediocre 2-seat monoplane powered by a 80-hp Gnome. I can not imagine what the two '3-seaters' powered by 50-hp engines were. These machines must have had a very poor performance; even the S-7 with its 80-hp was underpowered. (3) Page 109: 'Lt Ulyanin' was, in fact, Lt. Colonel Sergi A. Ul'ianin, the commandant of the Russian Officers Training School at Gatchina. (4) Page 111: Turkey actually purchased two DFW 'Mars' biplanes. The other German pilot was Mario Scherff who on one occasion piloted the DFW on a long reconnaissance flight with Ataturk as his observer. Scherff wrote about his exploits in the RAF Flying Review issue of May 1958."
"I covered this ground in some detail in my own ten-part series, "The Origins of Aerial Bombardment" which appeared in AEROPLANE MONTHLY from December 1989 to September 1990. I included rather more photographs showing that the Rumanians had adopted a cockade by early 1913 with a white/yellow (?) center. Photographs of Greek and Turkish aircraft show no markings at all. The first clear instruction regarding military markings was issued by the French in an order dated 26 July 1912 covering aeroplanes, airships, and balloons of the Aviation Militaire. Cocardes were painted on by the end of Summer 1912. There is a photo of a Greek Farman Longhorn with stripe markings on its wings, but the date of this photograph is not clear."
Harry Woodman, 10 The Byeway, East Sheen, London SW14 7NL, England.

"I read the article about the Balkan Wars (SAFO #64) with great interest because some of the photos in the article were sent to me by a friend in Sofia. He also sent me a copy of a photo of a two-seat Bleriot XI with Bulgarian roundels at mid-span on the top surface of the wings and the black(?) number '1' on the rudder. The proportions of the roundel are as shown in sketch (a); the colors are, from the outside, red, green, and white. He also sent a photo of a Nieuport IV, but there are no traces of any markings.
Calsyn Frans (SAFCH #854), Oude Staatsbaan 21, B-9991 Malsegem, Belgium.

"You're to be congratulated for the series on the Israeli Air Force. The Israeli are particularly closed-mouthed despite the fact that all the nations surrounding Israel have data denied the general public. I assume you know that a third F-15 unit has just been activated at Tel Nof. This past December (1992), I visited the Israeli Air Force Museum at Hatzerim where there are more than 60 types of aircraft on display. Even enemy types are represented including the MiG-17 (which Israel used briefly in combat), the MiG-21, and a Hawker Hunter which at one time equipped the air forces of Jordan and Lebanon."
Murray Rubenstein (SAFCH 1299), 867 Queen Anne Rd., Teaneck, NJ 07666.

"Regarding the colors of Brazilian PV-1 and PV-2s (SAFO #65 page 4): I've seen only three photos of genuine FABr PV-1/2's and while they aren't exactly definitive, they seem to support the gray colors suggested by the EM ESCALA article. However, I wouldn't call it 'dark gull grey'; seems much lighter to me, and as far as I can discern, the color is applied evenly over-all. Someone in Brazil must have color slides of these aircraft taken during their service. Perhaps the staff of EM ESCALA could appeal to those persons for assistance in settling this. The photo I have (of s/n 5043) also has a unit insignia of some kind (possibly either 2° Grupo de Bomb. Medo or 1/7° GAv at Salvador). I have a note that AIR COMBAT Summer 1974 has a photo of an FABr PV-2 taken at the Lockheed (Burbank) plant but, oddly, this aircraft is marked as '1156' which doesn't match with any of the BuA numbers of known FABr PV-1's or PV-2's.
"It is interesting to note that Andrade's 'Latin American Military Aviation' alleged that the FABr operated at least six ex-RAF Ventura IIs, although I have never seen a shred of evidence to support this claim. In this connection, it would also be of interest to learn the colors of the solitary FABr Lockheed B-34 (s/n 5074, ex 41-38147).
"Jorge Delgado's side-views of an Ecuadorean Army T-41 were very welcome. Readers may be interested to know that the Army T-41s are known to have included three T-41Ds acquired in April 1974 (s/n SAE-E-150, 155, and 160, later modified to 'AEE') in a somewhat more high-visibility color scheme, and at least one Cessna 172G in November 1965 as AE-R-1520 (for some reason).
"I should also like to express my congratulations to John Hayles on his excellent summary on Israeli Air Force Squadrons, which has been a subject of much debate."
Dan Hagedorn (SAFCH #394), PO Box 682, Centreville, VA 22020-0682 USA.

Continued on page 53.

THE NEW EUROPE IN THE SKIES

"The December 1992 issue of AIR INTERNATIONAL provides a much appreciated summary of the status of Eastern European and Balkan national insignia. However, a couple of clarifying comments are in order. First, the roundel for Bulgaria (shown in photos of MiG-23UB and L-29 Delfin) is incorrectly described as 'formed by the national colors of red, white and blue". The national colors of Bulgaria are white, dark green, and red. This is also the color order outward for the roundel which was used for a short time in 1940 prior to the RBAF assuming quasi-axis livery.

"Regarding Serbia, the article states: 'The insignia adopted by the Serbian (provincial) Air Force has changed in only a few months from a design identical to that used by the new JVR but with colors arranged with red at the top followed by blue and white, to a roundel with white in the center then blue and red in the style of the old Imperial Russia markings'.

"As for the reminder of Jugoslavia, the insignias for both Croatia and Slovenia are unclear graphically: Croatia's red and white checker-board shield has five coat-of-arms atop it of which I can resolve only four: I'm forced to leave the fifth set to the reader whose heraldic acumen is greater than my own. The Slovene markings, as shown below, are carried on a Bell 412 of the (Slovenian) Territorial Defense Force (TDF). The position of the badge is determined by convenience and migrated from the engine panel to the center of the door when carried on the TDF's single Augusta A-109. The Bell 412 is in civilian markings applied after it was acquired as desertion largesse from the JVR; the paint disguised the machine from Belgrade negotiators during succession talks. [Editor's note: See the review of the Slovenian decals elsewhere in this issue.]

"The CIS is represented by only Ukraine. The insignia shown below is an azure disk with a amber Ukrainian 'Golden Trident'. The disk is surrounded by a thin, white ring. As for Russia herself, this author has seen only a/c with the red star overpainted with a small Russian tricolor on the fin. The CIS AF at large apparently maintains the markings of the former VVS. Even less has been said about the insignia of the three transcaucasian republics (Armenia, Azerbaijan, and Georgia) and their neighbor to the immediate north - the autonomous republic of Chechen-Ingush, although all possess skirmish-tested air arms. If anyone can thrown any light hereon, I would be most grateful."

Tim De Pace (SAFCH #1233), 1242 Happy Valley Rd., Santa Cruz, CA 95065-9730 USA.

"I just finished watching a TV news program about the Serbians getting ready in case of military action from the US and other countries. They have a new insignia on their aircraft; a circle divided horizontally into three equal bands of blue, white, and red (from top to bottom). Just thought this might be of interest, since it looks like the Yugoslav insignia is no more."

John Grier (SAFCH #251), 4735 Splendid Circle S., Colorado Springs, CO 80917 USA.

[Editor's note: John also included a bunch of clippings from an unidentified commercial magazine (and therefore unprintable here). These include a nice shot of a Croatian An-2 and MiG-21bis '101' with the new national insignia and an excellent closeup of the Croatian insignia clearly showing the designs (but not the colors) of the five coat-of-arms above the chess board. Also included were a closeup of the new Slovenian insignia and the Ukrainian insignia as used on the MiG-29 in Canada.]

The Croatian magazine HRVATSKI VOJNIK (29 sijecnja 1993) has several pages of color photos of Croatian MiG-21. Two aircraft are shown in slightly different markings. The serial numbers are small but appear to me '102' and '103'. The b&w photo sent by John Grier show '101' in still different markings. Let me see if I can describe the differences without offending you with my art work.

All three aircraft carry the checkered shield on the fuselage between the trailing edge of the wing and the horizontal tail. 101 carries a broad fin flash without any additional design; 102 carries the same fin flash (red/white/blue from to bottom), but with the checkered shield in the middle; on 103, the fin flash extends the full width of the vertical tail with the checkered shield again in the middle. 101 carries its serial in large black numbers on the fuselage near the nose; 102 and 103 carry their serials in small white numbers directly above the fin flash on the dark-colored dielectric panel; there are signs on both aircraft of the numbers having been removed from the nose. Several photo show that at least one of these aircraft (possibly 103) carried a pair of flamboyant insignia on the nose; these consist of a heraldic shield directly below the cockpit with the inscription USVETNIK above and VUKOVARA below the shield, and, further forward, a black knight's helmet with dark flowing plume and checkered shield with the number '1' superimposed. This insignia does not appear on all photos of 103, but if it was removed from the aircraft of the photos is not obvious. [Editor's note: This certainly proves that a picture is worth a thousands words. Does anyone what the loan of these photos to create a set of drawings, or do these already exist?]

"In his most recent letter, my Bulgarian friend told me that the Bulgarian AF has recently changed over the roundel national insignia. In the last issue of Air Force's Monthly, there is a color photo of a MiG-23 and L-29's with the roundel carried in the same places as the old star markings."

Calsyn Frans (SAFCH #854), Oude Staatsbaan 21, B-9991 Malsegem, Belgium.

"I am enclosing several photos (pages 49 & 50) of aircraft carrying the new Bulgarian Air Force insignia. The roundel has a red outer ring, a green middle ring, and a white center. These photos were sent to me by my friend, Stephan Boshniakov, PO Box 48, Sofia 1184, Bulgaria."

Kim Margosein (SAFCH #104, 2813 E 192 St., Lansing, IL 60438.

"According to the information I have received, the Lithuanian Air Force currently (April 1993) has the following aircraft: 24 An-2, 4 Aero L-39, and 2 LET 410. A news items in a Lithuanian paper mentions there is a requirement for combat aircraft to protect Lithuanian air space, possibly up to 80 fighters."

David D. Dulaitis (SAFCH #), 417 Preston Circle, Sunny Hills, FL 32428.

"The Vojenske Letectvo Armady Slovenskej Republiky (Slovak Air Force) has adopted a national insignia consisting of the Slovak State badge; an early-Gothic coat-of-arms in red with a white double cross over three blue hills. The dimensions are the same for all aircraft types; the width is 500 mm and the height is 630 mm. On dark surfaces, this insignia is outlined with a 10-mm wide white band. These markings are applied in six positions, above and below both wings and on both sides of the vertical fin.

These markings replace the Czecho-slovak Air Force roundel on the aircraft of the Slovak Air Force. The first aircraft received these markings on 18 march 1993. It was an Aero L-39C, c/n 230102, s/n 0102. This aircraft was followed by L-39 s/n 0101 & 0112; L-410FG 1203; and An-24 s/n 5605 & 2903. These new markings are being applied to other aircraft by Letecke Opravovne Trencin (Repair and Maintenance AF Factory at Trencin) in west Slovakia.

Oliver Chalas (SAFCH #1301), Legionarska 47, 911 01 Trencin, Slovakia.

"According to THE BALTIC INDEPENDENT' weekly newspaper (issue of 15 Jan. '93), Germany has provided the Estonian Border Guard (Eesti Piirivalve) with two Czech-built aircraft (Zlin 42?) from former East German AF stocks, as part of a package (to include patrol boats) for the border forces of all three Baltic republics. The paper stated that the Estonian planes had already been delivered but were not yet in service, according to the Defense Ministry.

"The same paper claimed (26 Feb. '93) that the two turbo-prop aircraft didn't reach Tallinn until 22 Feb., in time to fly during the parade for the 75th anniversary of Estonian Independence Day on 24 Feb. '93. (The German military delegation reportedly then traveled to Latvia to present a similar package.)

"In the 5 Mar. issue, the newspaper stated that 'two military planes' were donated by Germany to Lithuania on 3 Mar. '93, bringing the total to 26 aircraft for the Lithuanian Air Defense Force. As a previous report (6 Nov. '92) had given the total of LADF as 21 (An-2s), three more aircraft must have been acquired prior to the German donation.

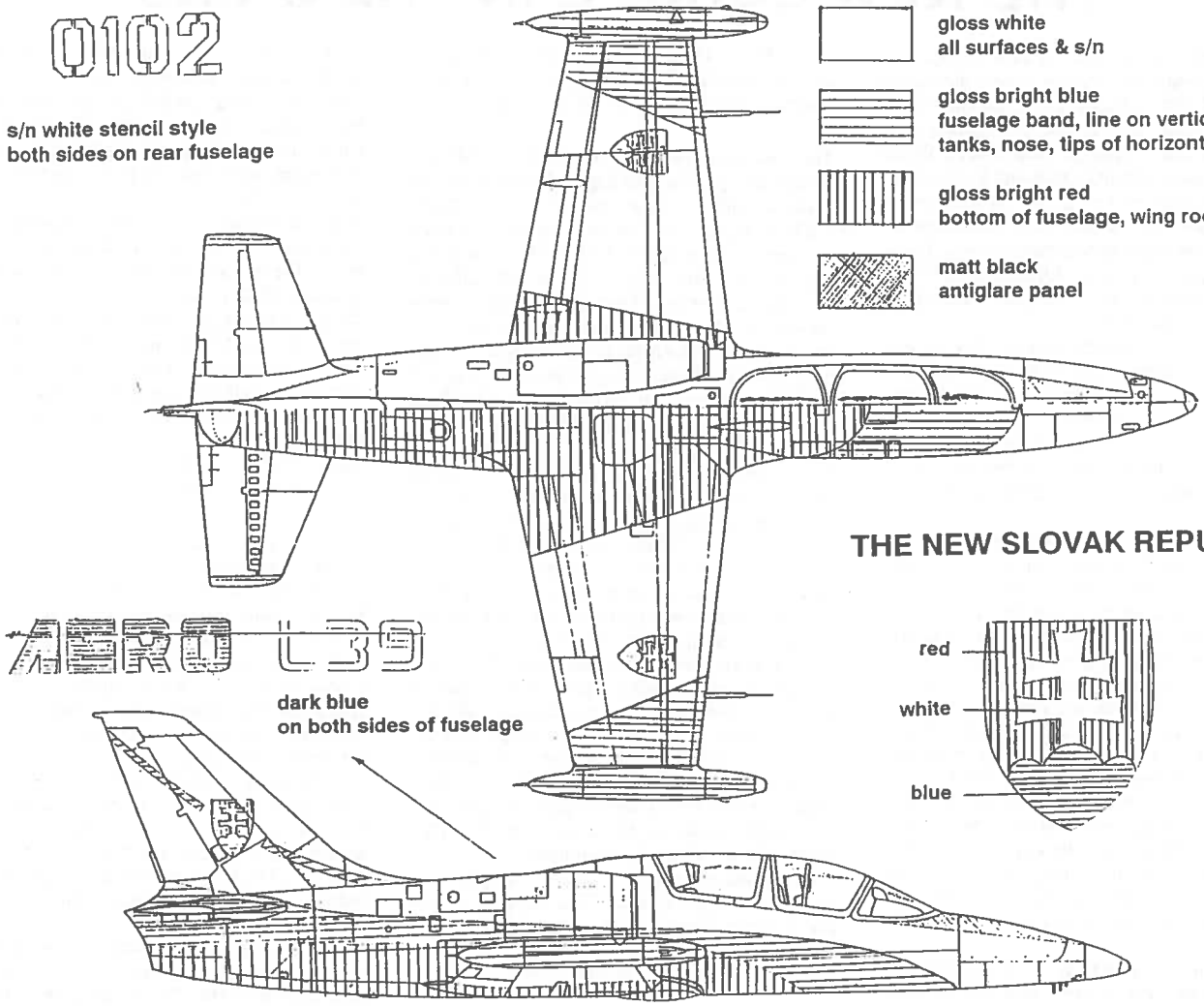
"On a more civil note, the 29 Jan. '93 issue claimed that the largest Baltic airliner fleet was that of Latvian Airlines: 18 Tu-134s and Tu-154, 12 An-24s and An-26s, 'several' Mi-8, and 'a handful' of An-2s. Starting with this summer, most of these Soviet types are to be sold off, over a two year period, to be replaced by US aircraft.

"I have an Estonian newspaper clipping which shows an Estonian Air Tu-154 in a much more dramatic color scheme (although I don't know the colors) that shown in SAFO."

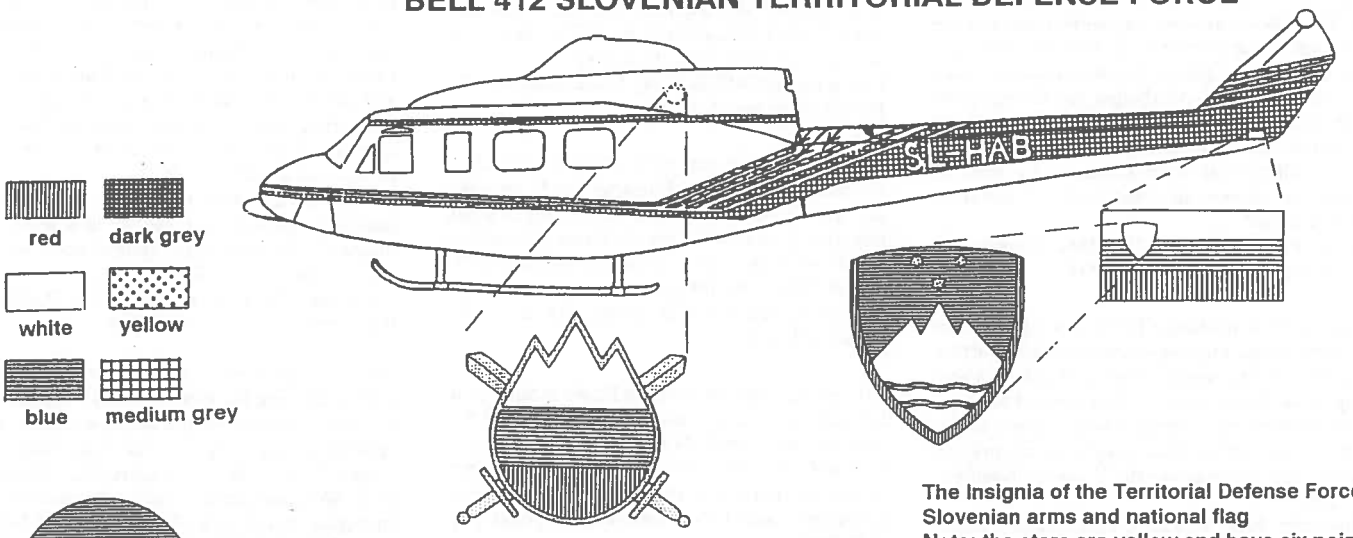
Ted Koppel (SAFCH #118), 3520 N. Rolling Rd., Baltimore, MD 21244-2202 USA.

"Enclosed (on page 49) is a photo of a MiG-25 Foxbat carrying the new Ukrainian insignia. This insignia is carried on the tail and on the under surfaces of the wings. I took this photo on 27 August 1992 at the First Ukrainian Airshow in Lvov, Western Ukraine. There were many aircraft on display, including Su-25, Su-22, Su-27, MiG-25, MiG-29, Jak-52, MiG-27, Mi-8, Mi-17, and Mi-26. They all carried this new national insignia, but the color schemes were the same as used when these aircraft served with the Soviet Air Force."

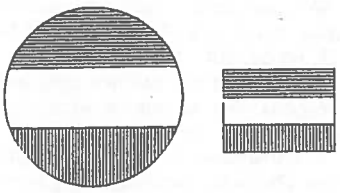
Igor N. Gordelianow (SAFCH #1066), ul. Strijskaja 179 kw.68, Lvovskaja obl.g.Drogobych, Ukraine 293720.



BELL 412 SLOVENIAN TERRITORIAL DEFENSE FORCE



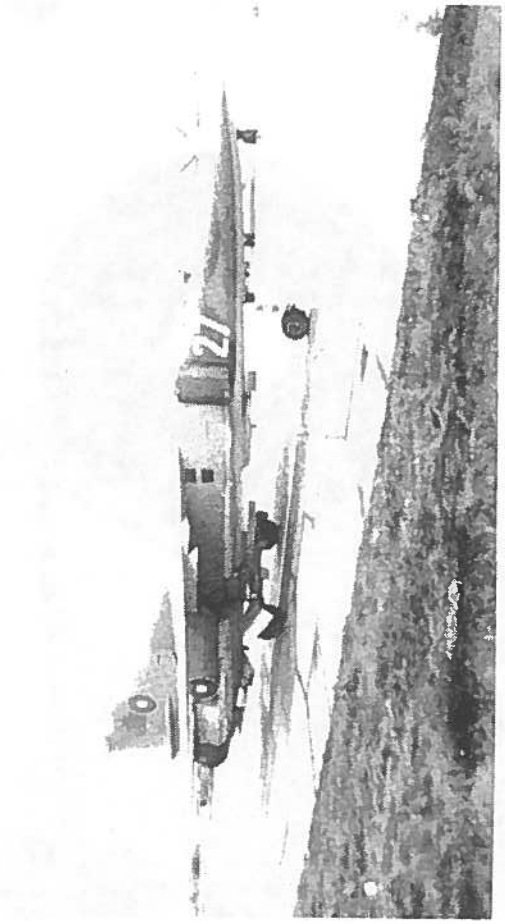
The Insignia of the Territorial Defense Force
Slovenian arms and national flag
Note: the stars are yellow and have six points

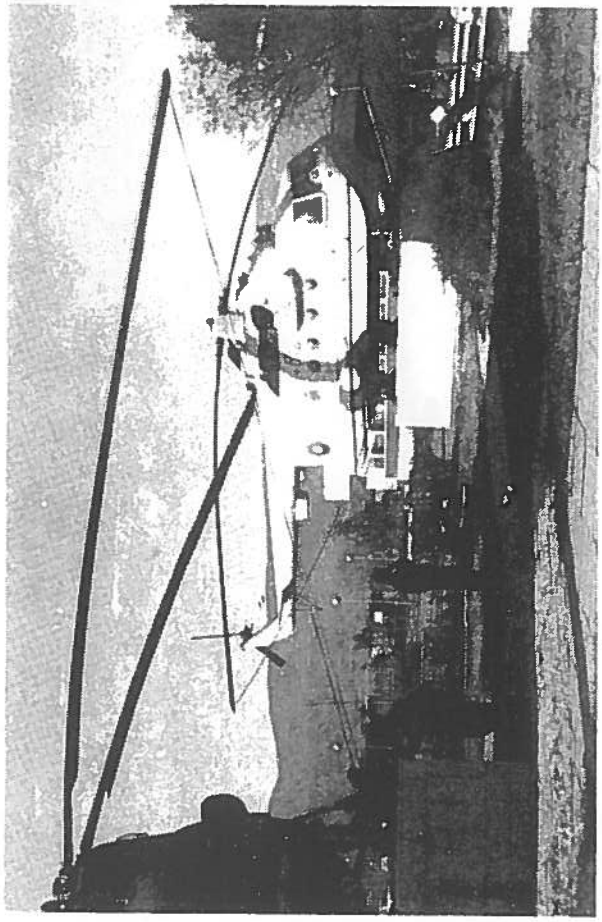


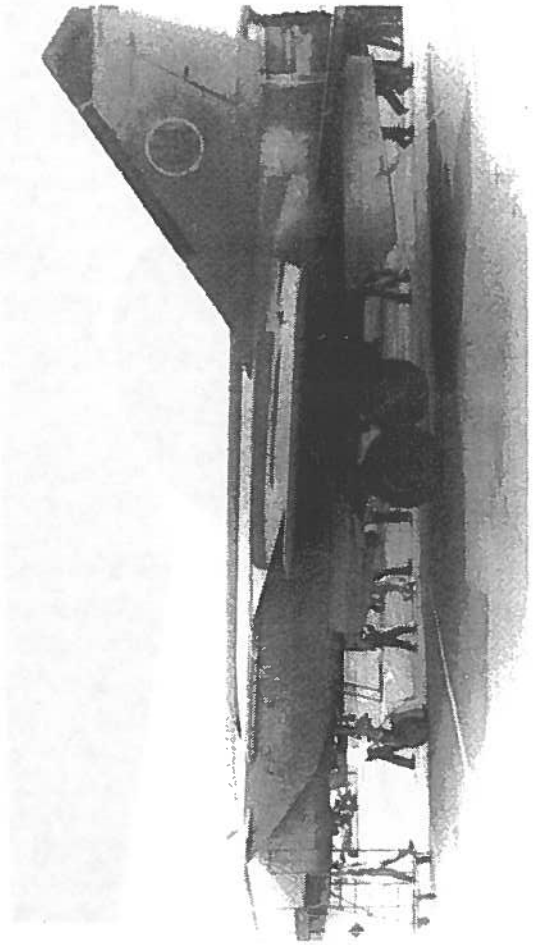
The current insignia and fin flash of the 'JVR'
'Jugoslovensko Rento Vazduhoplovatov'
Jugoslav (national) Air Force

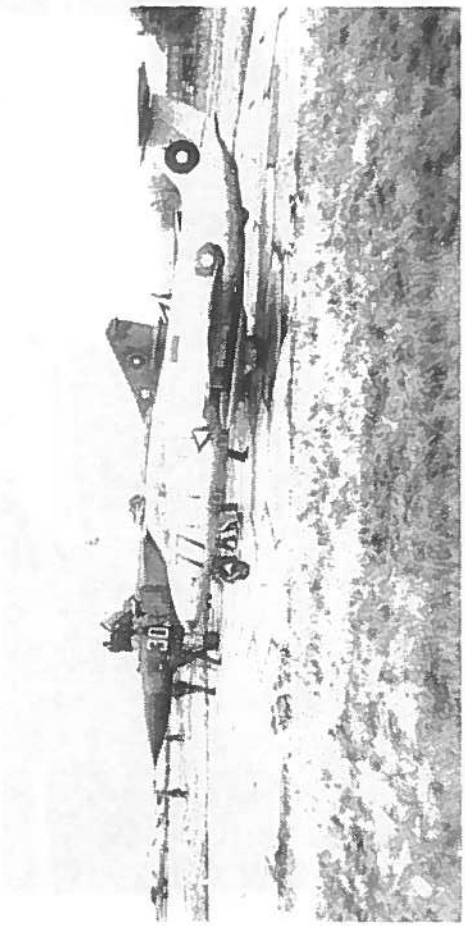


The 'Golden Trident', an ancient and obscure device long associated with Ukrainian autonomy
The figure on the disk is amber colored









THE TEZIUTLAN PRIMARY TRAINER

Santiago A. Flores

[Author's Notes: Since the publication of the article on the Serie A Biplane in SAFO #46, information has come to my attention of another Mexican-built training aircraft, the Teziutlan trainer. While this design did not meet with the same success as the Serie A trainer, it was a good aircraft. However, it appeared at a time when US aircraft were being supplied in large quantities to the Mexican Air Force under the Lend Lease Program.

The following information is taken from the article "Teziutlan Trainer" by H. A. Hershfield Jr. that appeared in SKYWAYS magazine for February 1943, Vol. 2 No. 2.]

"Mexico has had, for hundreds of years, some of the most skilled woodworkers in the world, and today, through the vision of dynamic General Roberto Fierro Villalobos, Chief of the Mexican Air Force, the woodworkers are producing as fine a low-wing trainer as any air force could desire.

"Designed by veteran pilot-engineer, Antonio Sea, who designed his first plane in 1908, the Teziutlan trainer is built entirely of Mexican spruce and plywood. The plywood factory, located near Mexico City, turns out sufficient plywood for a dozen factories, using native mahogany and a form of poplar that is native wood. The tensile strength of this plywood is ample for aircraft use, and it is easily worked into simple curved surfaces such as are found on the Teziutlan.

"A conventional truss fuselage is built of spruce longerons, uprights and diagonal members and is sheathed with plywood, which is glued and nailed to this structure. Bulkheads of plywood are used and, at the cockpit station, plywood is used, both inside and out, giving a box-type construction to the sides and bottom of the fuselage at this point, thus giving an added pilot-safety factor. The wings have box spars and are covered with plywood as far aft as the rear spar. Fabric is used from this point to the trailing edge. Warren truss-type ribs are used and are constructed of native spruce and plywood.

"The ailerons are operated by a ball-crank system and are very effective, even at speeds as low as 25 mph. The split horizontal tail surfaces are unusual in as much as they are in three sections, best described as a plywood covered box spar with a moveable leading edge section attached to the front spar, which acts on the same principle as an adjustable stabilizer, and the conventional elevators attached to the trailing edge of the box spar. The leading edge is adjustable from both cockpits by means of a crank and is very effective, in fact, sensitive and positive in its action, which allows perfect trim longitudinally.

"The entire ship is covered with fabric and a glass-like finish is obtained by hand rubbing the fabric covered plywood. The finish effect is highly reminiscent of the old Lockheed Vegas.

"Flight characteristics are excellent. The author flew the ship under very adverse conditions -- the rainy season was in progress and very turbulent air was prevalent. The ship was off after about a 150 ft run and climbed at approximately 850 ft/min at an air speed of 85 mph. Considering that the military field at Balbuena is 7,420 ft above sea level, this performance is exceptional.

"The Lycoming engine of 125 hp is installed with a simple open-type cowl, and its rubber-bushing mount leaves the Teziutlan free of vibration and the engine provides a reserve of power that is ample due to the exceedingly light wing loading. At about 50% power, the ship climbs steadily at altitudes of 10,000 ft.

"All work is done in the military aircraft factory and is closely supervised by General Fierro and Engineer Sea. The factory, originally built to produce the Vought Corsair, now is capable of handling almost every aircraft project from propeller fabrication to the casting of aluminum wheels.

"General Fierro hopes to be able to supply these trainers to other South American countries and feels that the ship should find ready acceptance in Central and South America, for such reasons as ease of maintenance, ease of repair and outstanding performance under adverse conditions. So emphatic is General Fierro that the Teziutlan is the answer to the Latin American training program that he is now constructing a considerable number of ships for Mexico and will demonstrate the ship to any Latin American country interested in securing low-cost trainers that are free of priority delays and can be constructed in Mexican factories.

"Mexican aircraft manufacturing is not new, and it is possible that the country can supply all of the trainers for Latin America and relieve the present aircraft-production pressures here in the United Sates.

"General Fierro is at this time completing a secondary plywood trainer of design similar to the English Miles trainer. With a sliding hatch, retractable landing gear, and a 175 hp Lycoming engine, this ship is expected to be ideal for advanced aerobatics. This ship should be completed early 1943."

Specifications. Motor: Lycoming 125 hp; Propeller: 2-bladed fixed pitch; Wing span: 38 ft 5 in.; Length overall: 23 ft 10.5 in.; Useful load: 1,633 lb.

Performance. Maximum speed: 108.8 mph; Cruising speed: 102.6 mph; Landing speed: 24.9 mph; Stalling speed: 21.8 mph; Service ceiling: 22,960 ft; Absolute ceiling: 25,912 ft; Maximum range: 768.5 mi; Endurance: 7 hr 30 min.

In 1942, the National Aircraft Factory began construction on 50 Teziutlan primary trainers. The first one built was flight tested by General Roberto Fierro Villalobos to show his confidence in Ing. Antonio Sea's design. He then turned the testing over to Capt. P.A. Radames Gaxiola Andrade, who had been a test pilot at the National Aircraft Factory since May 1940. The Captain was an experienced pilot who had received his "wings" on 21 December 1938 and who took advanced training in the USA at Randolph and Kelly Fields in Texas in 1939.

He conducted further flight testing on the trainer, including a flight to Monterrey without any problems. Even the US Military Attache to Mexico, Capt. F.O. Jenkins, flew the Teziutlan trainer and congratulated the designer, Mr, Sea, after his flight in the ship.

The name chosen for this trainer came form the hometown of the President of Mexico, General Avila Camacho. It was officially given this name in the presence of the President's brother who was Secretary of Communication and Public Works.

Because of the influx of American-made aircraft into Mexico after 1942, and because General Fierro was removed as

Chief of the Air Force on 1 December 1942, only five trainers were completed. These were assigned to an Air Club near Military Camp #1 in Mexico City.

Later, one of these aircraft, serial EPT-1 (Entrenador Primario Teziutlan = Primary Trainer Teziutlan), was assigned to Escuadron Aereo 205 of the 3rd Air Group. The AOB (Aircraft On Board) list of 31 June 1947 includes the following for Esc. Aereo 205 (Bajadas Veracruz): 8 AT-6 trainers, 1 Teziutlan trainer, 1 OS2U Kingfisher.

Cpl. Mec. Carlos L. Vazquez, a mechanic assigned to the 205th, remembers this Teziutlan trainer. He says the entire fuselage was white with blue trim while the wings were silver. Cpl. Vazquez told me of an exciting flight he had in this aircraft with Brigadier General P.A. Adolfo Huerta Campuzano "The Mouse". (Huerta earned his "wings" on 23 December 1920 in a Serie A Biplane.) They were flying over the Port of Veracruz when the engine quit just above the old movie theater "Eslava". The General made a perfect dead-stick landing at Las Bajadas.

In May of 1949, the Squadron was moved to Ixtepec Oaxaca. The AT-6s were flown to the new base, but the Teziutlan was sent via rail. After that the history of this aircraft is cloudy. It is possible that it was sent to the 4/o Escalon de Mantenimiento in Mexico City.

Cpl. Vazquez stated that the engine was started about every two or three months and was run for about 15 min. After serving in the 205th Squadron, Cpl. Vazquez served in the 4/o Escalon de Mantenimiento where he saw many incomplete fuselages of Teziutlan trainers which had been abandoned and were eventually destroyed.

One Teziutlan trainer ended up in civilian hands at a flying school headed by Mr. Arturo Alvarez de la Cuadra who trained many pilots in this trainer. It is reported that this aircraft was the first one built and that it was sold to Mr. de la Cuadra by General Fierro. Mr. de la Cuadra liked the aircraft so much he requested three more for his school.

Sources and References:

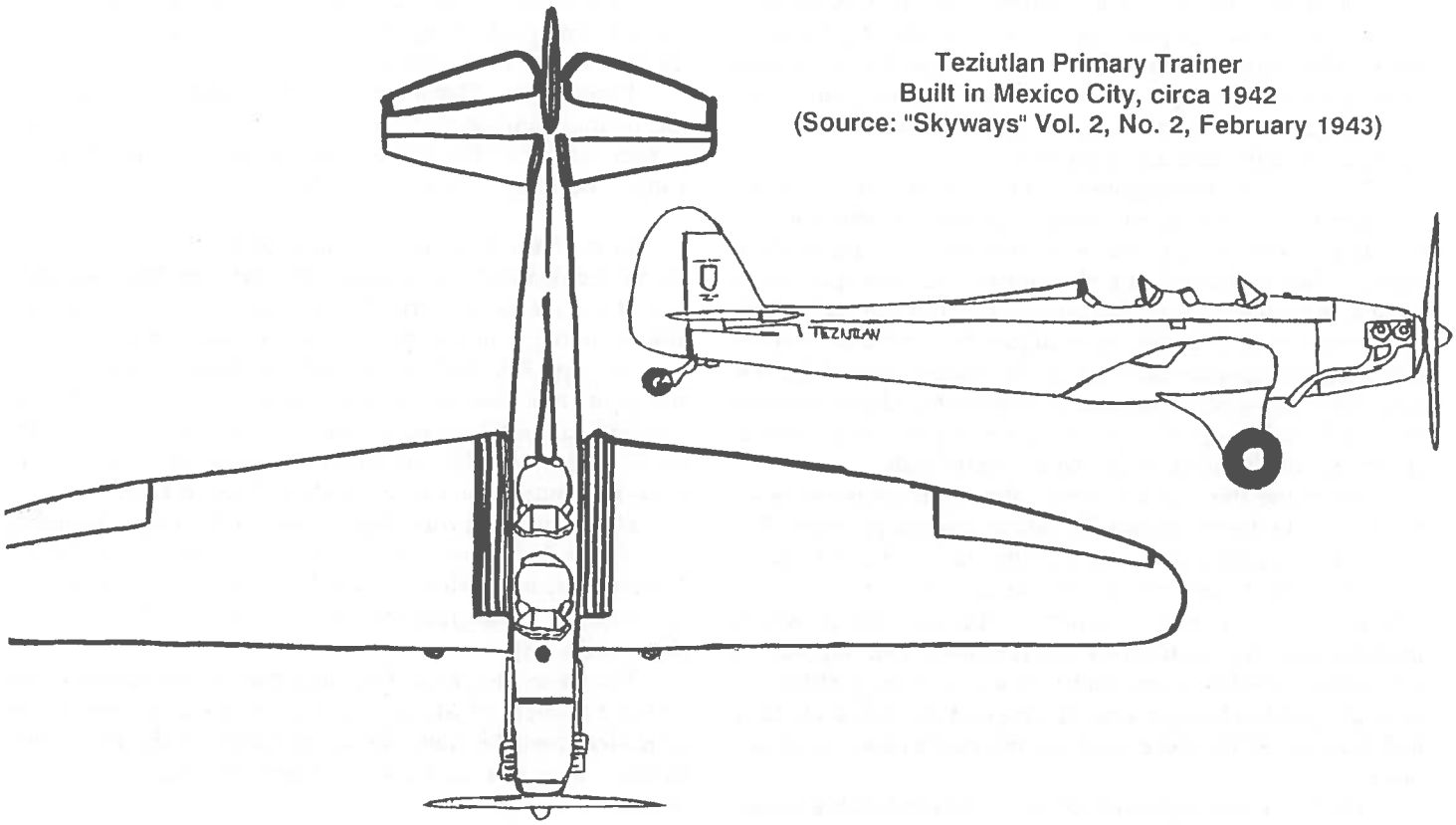
1. "Esta es mi Vida", by Roberto Fierro Villalobos, Mexico 1964, Pages 198-200.
2. "Kulkucan" Mexican Air Force Magazine. Vol. 1 No. 4, 15 February 1940, page 15. Vol. 1 No. 7 15 May 1940, page 16.
3. "Aviation: Magazine, September 1942.
4. "Skyways" Magazine, February 1943.
5. "Aero Digest" March 1943.
6. Interview with Mr. Carlos L. Vazquez, Mexico City, 1980.
7. "Historia Grafica de la Aviacion Mexicana" SCT, Mexico 1960.
8. "El Legionario" July 1954, Mexico City.
9. New York Times, 2 December 1942, page 29.

Photos (on page 36) via author.

a. A Teziutlan primary trainer over Mexico City during a test flight by Capt. P.A. Radames Gaxiola Andrade, test pilot for the National Aircraft Factory. (Ing. Enrique Velasco)

b. Left to right: Ing. Antonio Sea and General Roberto Fierro Villalobos at Balbuena Air Field, Mexico City. Note the aircraft logo on the vertical stabilizer; a shield formed form the initial FyS - Fierro y Sea. (Ing. Enrique Velasco)

Santiago A. Flores (SAFCH #588), PO Box 430910, San Ysidro, CA 92143-0910.



Teziutlan Primary Trainer
Built in Mexico City, circa 1942
(Source: "Skyways" Vol. 2, No. 2, February 1943)

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CHILEAN AIR FORCE INSIGNIA. SAFCH member Patrick Laureau of Chile is producing a series of large-scale decals representing current ChAF insignia. These 'stickers' have a diameter of 9.5 cm and self-adhering (after removing the protective backing). There are 16 insignia including those of the Fuerza Aerea de Chile, Escuela de Aviacion, Grupo de Aviacion No. 1 through No. 9, and No. 11, Grupo de Exploracion Antartica No. 19, Escuela de Especialidades, and the Halcones acrobatic team. The printing and colors are superb and the plastic is sturdy.
One each of these is available from the SAFCH Sales Service on a first-come-first-served bases. The price is $1.50 each.
Also available in the same format and price are 'caricature" decals for USAF A-10 and F-117.

SCWASIG, Spanish Civil War Aircraft Special Interest Group. Richard West, 96 Macoma Rd., Plumstead Common, London, SE18 2QL England.
SAFCH member Tom Sarbaugh sent in a copy of the first newsletter of the SCWASIG. If you're interested in modeling aircraft of the Spanish Civil War (and who isn't), you should give serious consideration to joining this new group. At the time the newsletter was written (March '93), they were not yet officially sanctioned; for this they need 5 IPMS-UK members. However, I strongly suggest that everyone interested write to Richard (if you're an IPMS-UK member, so much the better).
Their first newsletter was produced mainly to solicit members, but it does have two interesting articles: "Junkers Ju 52/3m Dustbin Turret" uses the drawings from the out-of-production Guano kit (by SAFCH member Wesley Moore) to describes how to scratch build the turret. "Bleroit-Spad 51 Conversion" presents 1/72-scale drawing (without markings) and some suggestion on what kits to rob for the fuselage, engine, and lower wing; but admits that the upper wing and tail surfaces have to be scratch built.
[Editor's note: Copies of their first newsletter are available from the SAFCH editorial office for a SASE and two extra 1st Class stamps.]

AIRCRAFT CONVERSION AND DETAIL PARTS, Aero Research, 6468 Valley Wood Dr., Reno, NV 89523-1263.
Jay Sherlock (SAFCH #431) is doing all US members a great service by providing a convenient address for conversion kits and detail parts from many different overseas sources. Companies covered (to name a few) are Aeroclub, Airwaves, Blue Rider, Eduard, Esoteric, Maintrack, PP Aeroparts, Ventura, and Verlinden. Prices are very reasonable. For example, Aeroclub's injection-molded, 1/72-scale Pilatus PC-9 is $11.10. Aero Research's Catalog No. 4 (January 1993) is now available from the address above. Six monthly updates are also available for $2.50.

WISE OWL WORLDWIDE PUBLICATIONS, 4314 West 238th St., Torrance, CA 90505-4509.
Member interested in subscribing to oversea magazines, but reluctant to get into IMOs, IRCs, and other problems associated with sending money overseas, should consider writing to Joe Daileda (SAFCH #28) at Wise Owl Worldwide Publications. Joe provides a subscription service for a number of English magazines, including IPMS-UK Magazine, Plastic Kit Constructor, and Windsock International. Also available are back issues, Windsock Dataplans, Windsock Datafiles, Hallam-Vac kits, and many more.

CRX SCALE, Gus Morfis, 4709 Green Meadows Ave., Torrance, CA 90505-5507.
Gus Morfis (SAFCH #3) writes that he is having a ball drafting plans for 1 inch = 1 foot scale flying models. Plans currently available include P-40B Tomahawk, F8F Bearcat, Bf-109F/G, P-51D Mustang, Spitfire for $8.50 each; and P-38 Lightning, Kawasaki Tony (4 versions) and FW-190A/-190D/Ta-152C for !2.50 each. Plans are shipped via First Class mail, postpaid.

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Continued from page 46.

"The RNoAF has organized the assets available from the civilian helicopter companies into squadrons. These helicopters have been seen on exercises in makeshift camouflage with the new low-viz roundel. The civilian colors are easily visible on photos. The assignments are as follows: 751 Skv. Bell 212 and 214; 752 Skv. Sikorsky S-61N, 753 Skv. Bolkow Bo-105, Bell 214, & Aerospatiale Ecureuil; 754 Skv. Aerospatiale Super Puma; 755 Skv. Aerospatiale Super Puma; 756 Skv. Bell 212 & 214 and Aerospatiale Ecureuil; 757 Skv. Bell 214, Aerospatiale Ecureuil and Lama. Three Boeing Chinooks are available to units requiring heavylift capability.
"The low-viz roundels have also been seen of Falcon 20 EOM, Bell 412m and DHC Twin Otters."
Knut Erik Hagen (SAFCH #903), Stamhusveinen 67, N-1181 Oslo, Norway.

"With regard to the issues I raised in SAFO #64 regarding 'correct' aircraft designation, please understand that I'm not trying to make a mountain out of a mole hill here. Certainly there are instances in which local users of an aircraft type (especially in Latin America) referred to a given aircraft by a locally accepted moniker. The Argentine Navy's name for their CW-16's, for instance, was 'Kellito', unique to that service, and without parallel anywhere else in that types service so far as I know. Historians, in my opinion, have the responsibility to record the type used as accurately as possible. The AVG's primary mounts, for instance, were, strictly speaking, not P-40B's as they never received USAAC serials nor ever served with the USAAC. They were, rather, Curtiss Hawk H-81A-2's or 'Tomahawk' IIA's, but I can't recall a single historian pointing out this rather obvious discrepancy. Though my own work and research, I have seen countless instances in which careless or incomplete research on the part of a writer has led many a serious historian on a wild goose chase (witness the 'Ecuadorean P-35' epic). In cases where a locally accepted designation or name was used, certainly that should also be included - but it needs to be documented use, not an assumption on somebody's part."
Dan Hagedorn (SAFCH #394), PO Box 682, Centreville, VA 22020.

"I spent the last 3 months of 1992 on a research trip to Italy. This was my 9th research trip to Italy since I started studying Italian front aviation in WWI back in 1976. It went well enough to give me enough answers to start doing the writing I've been wanting to do for some time now. I've spent the last 6 weeks on the phone and I'm pleased to be able to tell you the results of all this scrambling:
"A book, 'Italian Air Aces of WWI' will be published by Flying Machines Press in California in October 1994 and, a few months later, an Italian-language edition will be published by the Caproni Museum in Italy.
"The book 'Air Aces of the Austro-Hungarian Empire 1914-1918' will be reprinted by Flying Machine Press early in 1995 and, simultaneously, in Italian by the Caproni Museum.
"Finally, a book 'Markings and Camouflage of WWI Italian Aircraft' will be published in late 1995 by Flying Machines Press and shortly afterward in an Italian-language edition by the Caproni Museum.
"To say the very least, I'm thrilled! I hope, and trust, that others will be interested."
Martin O'Connor (SAFCH #366), 37 Cypress St., Floral Park, NY 11001 USA.

"On behalf of the Worcester County Scale Modelers Association, I would like to sponsor an SAFO subscription for Scott Dunn. Scott won the 'SAFO Award' at our 13th Annual Contest with his 1/48-scale Bf-109G-2 in Finnish markings. Thanks to all the new decals available, the number of SAFO entries grows each year and the judging is getting harder and harder. Scott's model was beautiful in every regard and we are so happy to add another person to SAFO's growing list of subscribers."
Rod Rixham (SAFCH #583), 117 Hartness Rd., Sutton, MA 01590.

"Enclosed please find a check to cover the cost of a SAFO renewal subscription for Mike Dobrzelecki as part of his award for the 'Best Small Air Forces Subject' at MOSQUITOCON II, the second annual contest for the New Jersey IPMS chapter. Mike won for a PZL P-11c in (of course) Polish markings. Mike is a superb modeler who can count among his many accomplishments wins at IPMS National Conventions and appearances on the PBS series "Adventures in Scale Modeling". I am honored to have him as the first winner of this award."
John Vitkus (SAFCH #1279), 72 Hudson Ave., Irvington, NY 10533-1314.

"Enclosed is a sketch of the national markings carried on the aircraft of the Communist Aviation School in Manchuria, No. 1 Squadron of the Air Combat Group, and possibly other units. This insignia consists of a red-bordered white disk with a five-pointed red star; within the star is another white disk with what appears to be a Chinese character in red. These markings can be seen on Ki-43, Ki-30, Ki-46, and Ki-45 in photographs found in the book 'Military Aircraft in the Chinese Civil War' reviewed in SAFO #64."
Rod Thorsen (SAFCH #967), PO Box 1601, Bishop, CA 93515.

BLUE RIDER DECALS. Blue Rider Models, 43A Glasford St., London SW17, England.

Our friends at Blue Rider have come out with a batch of new decals that are made to order for the SAF modeler. All these sheets are to the usual high quality expected of Blue Rider, so I wont bore you with comments about perfect registration, dense colors, complete instructions, etc. Instead, I'll list the contents of each sheet.

BR217: **Croatian Air Force**, 1941-45. (13 cm by 19 cm) (A) Fiat G.50bis white '3502' with red/white checkered insignia; (B) Blenheim Mk.1 black '1506' with red/white checkered insignia; (C) Bu-131 Jungmann black '7504' with re/white checkered insignia; (D) Bf-109G black '2105' with black cross insignia; (E) Bf-109G with black cross insignia; (F) Do-17Z with black cross insignia; (G) Ju-52/3m with black cross insignia.

BR219: **Albanian Air Force**, 1970s. (13 cm by 14 cm) (A) MiG-15 red '14' with black/red roundel; (B) MiG-15UTI red '246' with red star insignia; (C) Il-28 red '29' with red star insignia; (D) Il-28 red '026' with red star insignia; (E) F-4 (MiG-17) red '241' with red star insignia; (F) F-6 (MiG-19) red '3-35' with red star insignia; (G) F-7 (MiG-21) red '0208' with red star insignia. [Editor's note: If these schemes seem familiar, a note on the Blue Rider instruction sheet explains, "Main source for this sheet is the Small Air Forces Observer No. 12, April 1979. For further information and subscription details please contact, ..." Many thanks for the mention, Blue Rider. I wish everyone was so considerate.]

BR220: **Slovakian Air Force**, 1939-44. (Two sheets: 13 cm by 19 cm and 13 cm by 7 cm) (A) Avia B-534 with Slovak "double cross" insignia and Luftwaffe crosses; (B) Aero A-100 with "double cross" insignia; (C) Bf-109G with Slovak cross insignia; (D) Bf-109E with Slovak cross insignia; (E) Avia Bk-534 white 'M-7' with Slovak cross insignia; (F) Ju-87D white 'OK-XAC' with Slovak cross insignia; (G) Aero A-100 white 'S-22' with Slovak cross insignia; Aero A-100 with Slovak cross insignia; (I) He-111H white 'S-82' with Slovak cross insignia. [Editor's note: See detailed critique of these decals below.]

BR221: **Kondor Legion.** (Two sheets each 19 cm by 13 cm) (A) Bf-109B '6o10'; (B) Bf-109B '6o20'; (C) Bf-109B '6o29'; (D) Bf-109B '6o36'; (E) Bf-109B '6o51'; (F) Bf-109B '6o53'; (G) Bf-109B '6o56'; (H) Bf-109B '5o56' (different scheme); (I) Bf-109D '6o79'; (J) Bf-109E '6o99'; (K/L) Bf-109E '6o109'; (M) He-112 '8o2'; (N) Bf-108 '44o2'

BR404: **Ukrainian Air Force**, 1919-21 (13 cm by 8 cm) (A) Gotha GL-VII "Olena" with yellow trident insignia; (B) Fokker D-VII with yellow trident insignia.

BR801: **Slovenian Air Force**, 1991-92. (13 cm by 5 cm) (A) SA-342 Gazelle black 'SL-HAA' with fin flash; (B) Bell 412 white 'SL-HAB' with fin flash and shield; (C) Bell 412SP black 'SL-HAD' in military scheme; (D) Agusta 109A black 'SL-HDC' with fin flash and shield.

[Editor's note: This is the first in the "New Europe" series. The next three sets will be available by the time you read this. BR802 **Croat Air Force 1992**: MiG-21bis, Antonov An-2 (3), & UTVA-75. Price L3.25. **BR803 Serb Air Force 1992**: Bosnian Serb & Krajina Serb Militias and Bosnian Serb Air Force Gazelle (2), Mil Mi-8, Antonov An-2 & SOKO Galeb. Price L3.25. **BR804 Yugoslav Air Force 1992**: MiG-21bis, MiG-29UB, Mil Mi-8, SOKO Galeb & Alouette III. Price L2.75.

[Editor's note: I sent the Blue Rider Slovak decals to our good friend in the Slovak Republic, Juraj Rajninec, for his comments. Here is his reply.]

"The Blue Rider decal sheet for the Slovak Air Force is a welcome addition to the decals available to the modeler of the aircraft of the small air forces. However, the is one major error that makes part of the sheet unusable, and several minor errors that, if not corrected, will result in a model that is incorrectly marked and/or incorrectly identified.

"First, the major error: The 'double cross' insignia for the B-534 and S-328 is totally incorrect and beyond redemption. This insignia should be a white-outlined red cross on a blue field (rather than a blue cross on a red field). The proportions of the cross are also not quite correct; the cross is too thick and the horizontal arms are too far apart. The white ring around this insignia was added during the campaign in Poland in September 1939.

"Now to the corrections to the instruction sheet.

(A) Avia B-534: The insignia on the top and bottom of the wings is drawn too small; their diameters should be nearly equal to the chord of the wing. Also, the drawings fail to show the German crosses that were also carried on the top and bottom of the wings. The white outline on the insignia on the rudder is drawn much to wide. (See photos a and b.)

"(B) Aero A-100: The insignia on the rudder should be flush with the trailing edge of the rudder. (See drawing in SAFO #57.) Photo c shows a SAF Letov S-328 with the 'double cross' insignia and Luftwaffe crosses.

"(C) Bf-109G-6: The identification of this aircraft is not correct. There never was a 14th Fighter Squadron in the SAF! The 13th Fighter Squadron did served in Russia, but with F-3s, G-2s, and G-4s (no G-6s) and its aircraft carried Luftwaffe insignia, markings, and camouflage (not SAF insignia).

"(D) Bf-109E: The 12th Fighter Squadron was never equipped with Bf-109Es.

"(E) Avia B-534: The 13th FS was on the Eastern Front only from July to August 1941 (and it did not operate in the Kiev area in 1942). The 13th FS B-534 in Russia during 1941 did not carry the yellow-painted nose. (See photos d, e, & f.)

"(F) Ju-87D-1: All SAF Ju-87 were of the D-5 type, and all these were painted in Dunkelgrun 71 over Hellblau 65 (not in splinter camouflage).

"With the above corrections, this Blue Rider sheet can be used to accurately model Slovak a/c from the later part of the war. However, we are still out of luck when modeling Slovak a/c carrying the 'double cross'. Perhaps Blue Rider can produce a correction sheet for these elusive markings."

Juraj Rajninec (SAFCH #98), Legionarska 41, 911 01 Trencin, Slovak Republic.

Photos (on pages 55 & 56) via author.

a. This Avia B.534 of the 12 Fighter Squadron crashed on landing on the airfield at Spisska Nova Ves in November 1939. Note the large SAF insignia and Luftwaffe crosses on the upper surface of the wing.

b. Avia B-534 of a the Training Squadron at airfield Piestany in Autumn 1941. Note the large SAF insignia and the Luftwaffe cross on the lower surface of the wing.

c. Letov S-328 of the 16th Reconnaissance Squadron, 16 September 1939

d. Avia B-534 of the 13 Fighter Squadron just before it was sent to the front early in July 1941. A yellow band on had not yet been painted on the fuselage, but it would be added before the aircraft was sent to the Eastern Front.

e. Avia B-534, code M-4, of the 13th Fighter Squadron at the Eastern Front, August 1941. Note the absence of yellow identification markings on the nose.

f. Avia B-534 of the Training Squadron, Flying School, at airfield Trencianske Biskupice, Summer 1942. Note the large insignia on the upper surface of the wing.

g. Wrecked Soviet SB-2 bombers at Tarnopol airfield, 1940. Note non-standard SAF insignia on the rudder of the B-534 in the foreground.

Norwegian National Insignia. "I have been selling decals of RNoAF roundels that were printed as a joint venture between myself and 'Flying Colors' in Sweden. These decals are available from some shops in England and the USA. Flying Colors also have a number of other decal sets available for Swedish and Danish aircraft. Their address is: Flying Colors, PO Box 3038, S-172 38 Sundbyberg, Sweden." Knut Erik Hagen (SAFCH #903), Stamhusveinen 67, N-1181 Oslo, Norway.

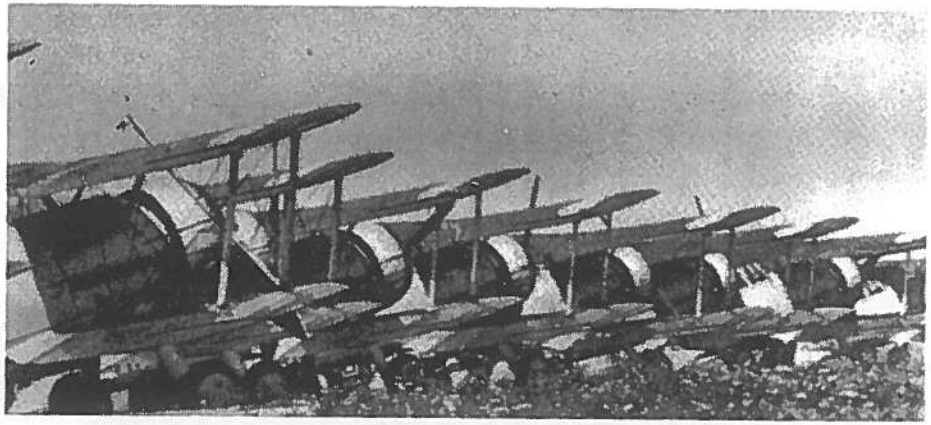
Knut sent the two Norwegian sheets for review. The larger sheet measures 18.5 cm by 11.5 cm and contains 85 national insignia in 8 sizes. The smaller sheet (72-002) measures 11.5 cm by 7 cm and contains 62 national insignia in 5 sizes. On the larger sheet the blue is a "dark blue" while that on the smaller sheet is a "light blue". In a hand-written note at the bottom of the instruction sheet, Knut comments, "Light blue mainly in use from ca 1970". The quality of both sheet is excellent.

These decals were accompanied by table titled "Aircraft of the RNoAF". It lists 50 aircraft (from the Northrop N3PB to the Bell 412) and the corresponding diameter of the wing and fuselage roundels and a notation on the size and color of the surrounding ring (if used). This table allows choice of the correct size insignia for your model, but for color schemes. insignia placement, and other markings you'll need other references.

"Three of the new **TECHMOD** should be of interest to SAFO readers: 72058 has markings for one Finnish and two Dutch Fokker D-21; 72068 covers for four Finnish Fiat G.50; and 72069 has decals for several Italian Reggiane Re-2005. All decals are absolutely first class both in research and printing. "**HI-DECAL** has released three new sheets in their Gulf War Series: 72-011 provides markings for the following MiG-21MF/SMT: Polish Air Force red '8189' with a regiment badge, two Soviet machines, Iraqi AF '21302', and a very colorful sharkmouth Luftwaffe '23+15'. 72-012 has decals for CH-47/Mk.1 Chinook in USAF, Spanish, and Argentine markings. 72-013 for the Su-24 Fencer C/D has markings for two Soviet, an Islamic Iranian AF, and an Iraqi machine.

"When I wrote the review of the Broplan vacuform PWS-10 kit a few issues ago, I criticized the producer for not including decals for the Spanish Air Force. This has been rectified by **HitKit** with a sheet that includes decals for no less than four Spanish PWS-10. The quality of this sheet is not as good as either TERCHMOD or HDL, but it is quite acceptable for the plain black Spanish markings. Unfortunately, this sheet is not widely available, so interested members may want to write directly to the producer (and SAFCH member) P.K. Musialkowski, Nocznickiego 13/42, 01-948 Warszawa, Poland."

Wojciech Butrycz (SAFCH #981), ul. Facimiech 12A m.25, 30 667 Krakow, Poland.





a

b

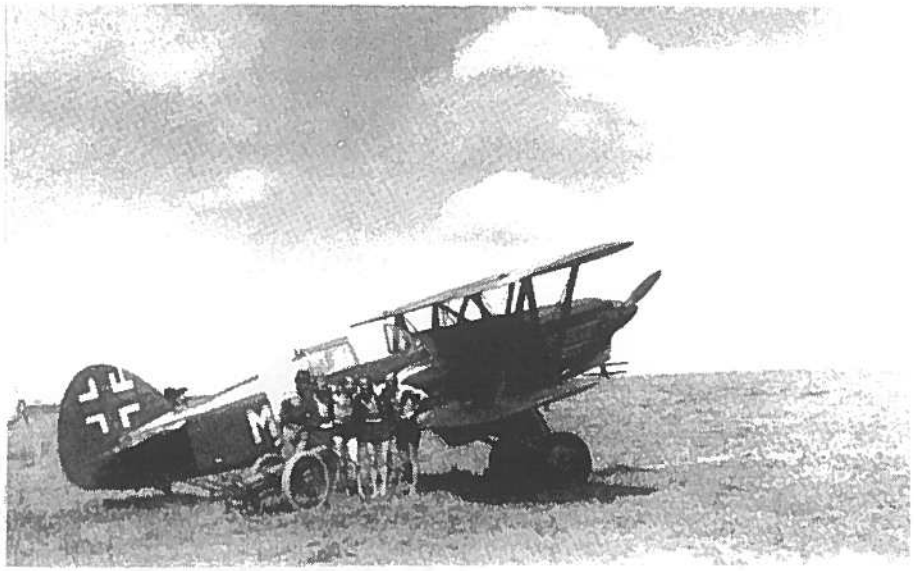


c

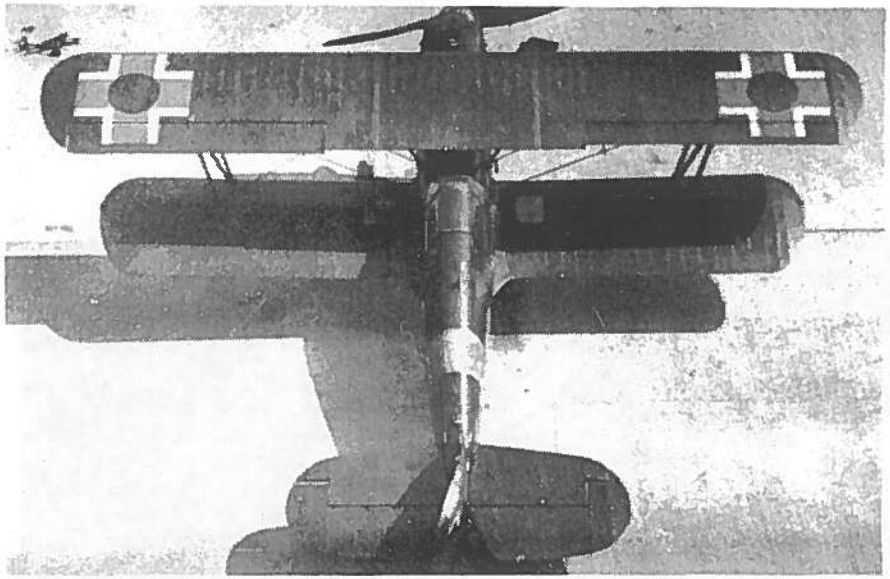




d

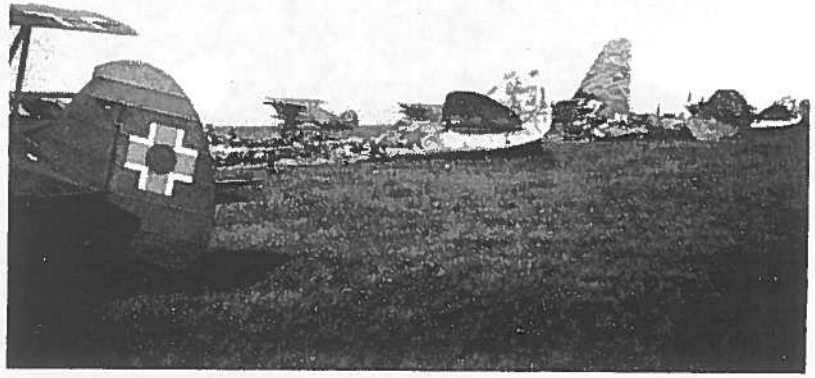


e



f

g



Focke-Wulf Ta-183, 1/72-scale, injection-molded kit. PM Models, PK 133 34712 Bakirkoy, Istanbul, Turkey.

Close on the heels of Huma Modell's releases of the Lippisch DM-1 and Focke Wulf Triebflugel comes another model of an aborted Luftwaffe project - the barrel-shaped, swept-wing, jet fighter Ta-183 "Huckebein". This project has more historical significance than the others because, at the end of WWII, the incomplete prototype fell into Soviet hands and it obviously inspired the MiG-15 series.

The Ta-183 kit is crisply molded on one sprue of light-grey plastic in the now-familiar PM style. By today's standards, the kit is rather simple; two fuselage halves, single-surface wings and tail unit, over-simplified landing gear, and a cockpit consisting of only a floor board and a chunky seat. Personally, I prefer this approach, particularly if it keeps the price reasonable. The average modeler can make an attractive model from this kit since the engraved panel lines look great and the canopy is clear. The super-detailer will, in any case, want to add his own embellishments anyway. The only place I would have wanted to see some detail is in those large, exposed wells; I know there is no information, but PM can probably "fake it" better that I can.

In summary, the PM Ta-183 is a kit that will give the average modeler several hour of building enjoyment and result in a model that will enhance any collection with an unusual and attractive subject. The contest modeler should be able to produce a super model that will be immune to changes of inaccuracies of shape, detail, or color scheme.

Gotha Go-145, 1/72-scale, injection-molded kit, Huma Modell, Kilianstadter Str. 9, D-6450 Hanau 6, Germany.

After releasing a large kit of Dornier Wal, Huma has returned to their usual format with two of the little gems for which they are justifiably famous; the Go-145 biplane trainer and Ar-196 monoplane trainer. The Go-145 was an attractively-angular biplane that saw extensive service with the Luftwaffe. It was built under licence in Spain an Turkey, and saw service in Austria and Slovakia. [If anyone knows of service in other countries, I'd appreciate hearing about it. Also, a article on the small-air-forces use of the Go-145 would be greatly appreciate.]

The Huma kit of the Go-145 is, as usual, very nicely molded; absolutely no flash, subdued fabric effect on the fuselage and all flying surfaces, and lots of well-molded small parts. Alternate parts are provided to build either the Go-145A two-seat trainer, the Go-145B gunnery trainer (with raised gun position), the Go-145C multi-role attack aircraft, or the Go-145D with enclosed cockpit and spatted wheels. The large decal sheet provides markings for four Luftwaffe machines and one Austria AF machine. It is disappointing that they didn't provide decals for Spanish and Turkish machines.

In summary, another excellent kit from Huma of an aircraft that can, with a little bit of research, be finished in a variety of small-air-force markings.

Arado Ar-396, 1/72-scale, injection-molded kit, Huma Modell, Kilianstadter Str. 9, D-6450 Hanau 6, Germany.

The Ar-396, developed from the more well-known Ar-96, was manufactured by Letov in Czechoslovakia and SIPA in France. While only four were delivered to the Luftwaffe, one of the Letov-built machines, 'RToWL', carrying hand-painted pre-war Czech national insignia, made a remarkable flight over Prague on 5 May 1945 during the uprising against the Germans. After the war, SIPA continued manufacture as the SIPA 111A which differed only in that the landing gear rotated 90° to fully retract within the wing. [Editor's note: Modification of the kit to this version should not be difficult. Since these aircraft saw extensive service in wars in North Africa, and it would not surprise me if some saw service with former French colonies. Do any of our French members have information on any such use?]

The Huma kit of the Ar-196 is fully up to their usual standard. The parts are crisply molded with engraved panel lines properly spare for a wooden aircraft. The cockpit canopy is superb; thin and clear with well-defined frames. The decals provide marking for one Luftwaffe machine, 'NS+OA'; what a disappointment that making for the Czech aircraft were not included.

This model with make an outstanding companion to a Ar-96 built from either the KP or Heller kits.

DAR-10, 1/72-scale, vacuform kit with injection-molded parts but no decals.

"This kit, produced by an unknown Bulgarian company, comes in a plastic bag with a sturdy cardboard backing. It is formed in a female model on a thick, translucent, white plastic also seen on recent kits from Russia. This plastic cuts well and normal cements are effective. Also included are injection-molded parts for the main and tail wheels, propeller, engine front, and canopy. The wheels are useable, but the propeller should be given to a figure modeler to make into Roman swords. The 8-cylinder engine front will also have to be replaced since the DAR-10 used a 14-cylinder engine. The canopy is a very crude molding and my sample had stress lines and was cracked. I vacuformed a new one, but a sanded, trimmed, and polished T-6 could possibly be used. I adopted the interior from the Letov 328 kit along with the bomb racks and ordnance. Since I am no good at having the circular fronts of a vacuform cowl come out circular, I used a cowl from the spares box along with engine and propeller. Aviation Usk has a decal sheet with Bulgarian Air Force markings and I used the crosses from this sheet to finish my model.

"I have found two references on the DAR-10: Green's 'Bombers and Reconnaissance Aircraft of WWII' and the June 1984 issue of AIR INTERNATIONAL. The descriptions in these two references differ somewhat in details. Green's book indicates a cowling with rocker-arm bulges while the AI article shows a smooth cowling. Also, Green claims the aircraft saw limited production and service use, while AI states that only two prototypes were built. To further complicate the situation, the 3-view drawing that comes with the kit shows a ventral window in the rear fuselage that is not indicated by the other sources.

"The kit scales at 9.5 m in length and 13.0 m in wingspan (AI has 9.83 and 12.65 m respectively). Considering the errors that can creep into vacuform construction, that's not too bad, nor is the kit. If you like this sort of aircraft, and if you're reading SAFO you probably do, the kit is available, by trade only, from: Stephen Boshniakov, PO Box 48, 1184 Sofia, Bulgaria. He also has some injection-molded La-15s in 1/72. Please write ahead for availability and trade interests."

Kim Margosein (SAFCH #104), 2813 E 192 St., Lansing, IL 60438 USA.

"Well, it looks like I'll have to open that bottle of expensive champagne I mentioned last time! The first two of the promised Zubr kits have arrived;the LWS-4A and its twin rudder cousin, the LWS-6. These kits are a great improvement over the earlier Broplan kits. Both have resin-cast parts for the wheels, propeller, guns, engines, etc. While these are not of the best quality, they are better than the vacuformed alternative. The kit consist of three white styrene sheets with over 37 well-molded parts and one transparent sheet with no less than 13 well-executed parts for the 'greenhouses'. The decal sheet provides 6 Polish national markings, a white bison, and a white '2' for alternative machines. The camouflage scheme is typical for the PAF in the 30's; light blue-grey undersurfaces and Polish khaki upper surfaces with all colors identified by their Humbrol equivalents. The instruction sheet shows the parts layout, an exploded construction diagram, interior arrangements, and the instrument panels.

"Very good reference material can be found in the book 'Bombers of the September 1939 Campaign' by Aerohobby Publications and the November issue of the British magazine AVIATION NEWS (Vol. 21, No. 13) which contains a 1/72-scale drawing and a short history with a few photos. The kit parts match perfectly with both references. This kit is highly recommended."

Wojciech Butrycz (SAFCH #981), ul. Facimiech 12A m.25, 30 667 Krakow, Poland.

LWS-5 Zubr, 1/72-scale, vacuform kit. Broplan, Janusz Brozek, ul. Pilotow 10G/33, 80-270 Gdansk. Poland.

High on my list of the "world's ugliest aircraft", even more unsightly than those French bomber of the 1930's, is the LWS Zubr. This fascinatingly misshapen aircraft has finally been kitted; not once, but in three different version. The culprit is Broplan of Poland who have brought out vacuform kits of the single-fin LWS-4A, the twin-fin LWS-6, and the twin-float, torpedo-carrying LWS-5.

The only kit I have for review is the LWS-5, but I am sure that it shares many parts with the two other kits. Molded on 5 sheets of medium-thickness white plastic are what appears to be at least a hundred parts. The parts are sharply delineated from the background sheet and feature engraved lines that, while straight, could benefit from a little cleaning up. The rib detail on the vertical fin and the moving surfaces is well done. While the vacuform sheets seem to contain every thing needed to complete the float plane, there is a small resin-cast sheet containing substitute engines, propellers, and machine guns. (Resin-cast tail wheels hint that this casting may be common to all three kits.) The interior detail is quite extensive, including vacuform parts for the pilot's cockpit, the bomb aimers position, and the gunner/radioman's position. The vacuformed clear parts are excellent which is good since the glass area is extensive.

The instructions consist of the obligatory exploded view, diagrams of the vacuform sheets identifying all the parts (an absolute necessity consider the number of parts), and a view showing the arrangement of the interior. Since the torpedo bomber was never built, the markings are conjectural and simple: large Polish chessboards under the wings, smaller ones asymmetrically placed on the upper surface of the wings, and smaller still national insignia on the rudder; there is no aircraft number or unit insignia. The decal sheet provides the necessary six chessboards (as well as the number "2" and

the "white bison" for a land-based bomber; obviously the same decals are used in each kit).
This is not a kit for the faint hearted; getting all those parts together in the right order and in the correct orientation is going to be a challenge - and those floats don't help anything. I'm tempted to toss the floats and scratch build the landing gear for a land-based version (but Bill Devins would probably throw me out of the Seaplane SIG).

Fokker F-VIIb/3m, 1/72-scale, vacuform kit. Broplan, Janusz Brozek, ul. Pilotow 10G/33, 80-270 Gdansk, Poland.
For a number of years I have been contemplating converting the Frog kit of the Southern Cross into a Polish Fokker F-VIIb/3m bomber. It didn't look too difficult; just add a gunner's position on top of the fuselage immediately behind the wing and some bomb rack under the fuselage. Now that I've had a chance to compare the Broplan kit of the bomber to the kit of the Southern Cross, I am no longer so sure. The most obvious difference is that the top of the fuselage on the SC kit curves downward from the tailing edge of the wing while that of the Broplan kit runs straight back. Sounds reasonable if Fokker wanted to add room for a gunner, but did Fokker really build two different fuselages. In addition, the nacelles of the Broplan kit are completely different from those on the SC kit (photographs seem to support this difference). Finally, the wing span of the bomber kit is slightly less than that of the SC kit, and the horizontal tail of the bomber kit is about 50% larger than that of the SC kit. Are these real differences in the full-size aircraft, or is one or the other kit incorrect. I'm suspicious of the tiny horizontal tail on the SC kit, but the nacelles, fuselage, and wing span differences might be real. Are there any Fokker experts out there who can help?
The Broplan bomber is molded on three sheets of white styrene with the parts well delineated with nice surface detail. All the parts are there but the little, fiddling ones, such as struts, bomb racks, exhausts manifolds, etc. would best be replaced by wire or rod; and the engines and propellers should either come from the spare-parts box or, better yet, Aeroclub.
The decals sheet provides marking for two aircraft; "4" with a squadron insignia consisting of a bomb-toting white elephant, and "6" with a squadron insignia consisting of a black crow.
Even if the Broplan kit is correct, it would not be too hard to correct the SC kit, so the Broplan kit is not absolutely necessary, but it is a very nice vacuform kit and should make up into a great model of the bomber. I'd use the Broplan kit for the bomber, stealing the engines and propellers from the SC kit. Then I can convert the SC kit into a PAF F-VIIa/1m (or maybe a LOT F-VIIb/2m).

Polikarpov I-15, 1/72-scale, injection-molded kit. Aviation Usk, 602 Front St., Box 97, Usk, WA 99180. $12.95.
Warning! This kit review is being written by an opinionated modeler who thinks he knows what an I-15 looks like. I attempted to make a model of "The World's Cutest Biplane" back in 1986, spending countless hour staring at photos and swearing at drawings.
This kit (made in what was Czechoslovakia) is a typical "short run" injection molded kit. You can't tell where the sprue stop and the parts begin (careful trimming required). The fit of the parts tends to be a little vague (more trimming). There is no assembly diagram (or anything identifying all those little parts), only a 3-view that doesn't match the parts (the parts are correct!). There are no alignment tabs or pins; my fuselage came out crooked, and I can't tell if it's the kit's fault or mine.
With patience, you do get a pretty good I-15. I believe the masters were made from the drawings in the Soviet magazine "Kril'ya Rodniya" (circa 1986), which seem to match all the photos I've seen. An I-15 is not a gull-winged barrel, and this kit captures most of its delightfully weird contours.
Some of the parts are pretty impressive for a SRIMK. The fabric-over-stringer effect on the fuselage is nicely done. The engine-nose fairing has all those bitty slots, and fits over the engine with only a little trimming. The decals, accurately registered, cover a couple of Soviet and a zillion Spanish Republican aircraft; it takes four pages of diagrams to cover them all.
I do have a few gripes. The telescope sight is way too big (it does have to fit through the windscreen). The fairing at the top of the landing gear actually blends into the lower wing root fairing; it took me three tries to carve one and its probably impossible to mold. The engine is too long; whack off the back (up to the cylinder heads); the Townsend ring (cowling) should overlap the fuselage when glued to the engine cylinder heads so that the engine-nose fairing pokes out ahead of it a little bit. By the way, in spite of the drawing on the wrapper, there is no exhaust collector ring, only straight stubs.
Lastly, as a public service, the short rods at one corner of the kit tree are the continuations of the lower blast tubes that fit between the cylinder heads at 3:30 and 8:30 o'clock; the longer rods at the other corner of the tree are the upper blast tubes (1 and 11 o;clock) that poke out of the gull-to-fuselage fairing; chuck them and replace with rod the same diameter as the lower ones.
Wesley Moore (SAFCH #84), 5802 North East 59th St., Seattle, WA 98105.

Thomas Morse S-4C, 1/72-scale, mixed-media kit. Toycraft Berg Ldt., 59-2 Mise, Shizuoka City, 422 Japan. Price: 3800 Yen (about US $31.00) plus 400 Yen (about US $3.50) post and packing.
This is the fourth in a series "Fabric Time Specials" conceived by Sugimoto Izumi of Altelier Noix and distributed by Toycraft Berg. The S-4C Scout is typical of this innovative series. It consists of resin-cast fuselage halves; cast-metal engine, cowling, firewall, propeller, wheels, axle, and Marlin & Lewis machine guns; etched-brass wing struts, undercarriage struts, and tail skid; brass wire for tail struts and control rods; brass tube for exhaust ports, and decals.
The surface detail is superb (the ribs on the flying surfaces are particularly well done) and there is absolutely no flash or surface blemishes. The resin is a dream to work on; only a few light strokes with a fine file are necessary to remove the molding gates. All parts are provided with positive location tabs so alignment should be no problem. The cast-metal parts are delicately molded, particularly the engine and machine guns. I'm not sure if I like the etched-brass struts; filing them to a streamline cross section may be a chore. The inclusion of an etched-brass name-plate is a nice touch.
The instruction sheet, in both Japanese and English, is very complete and includes painting and decal-placement information for two aircraft: an Army Scout '38633' and a Navy Scout '19'. The decals sheet is simple but excellent, consisting of national insignia (with separate red centers to avoid possible registration problems), tail stripes, fuselage and rudder numbers. The final touch is the inclusion of a real color photograph of a model beautifully finished in the Army scheme.
Atelier Noix has set a new standard for mixed-media kits. Don't let the resin parts turn you off; after working with it a few minutes you thing you're working with plastic and will have to resist the temptation to reach for the plastic cement. Other kits available in the "Fabric Time Series" are: Bristol Scout, Sopwith Tabloid, & Ansaldo Balilla. Promised for the future are the Nieuport 10, Nieuport 11, Roland D-II, Phoenix D-I, Hansa-Brandenburg D-I, Halberstadt D-II/III, Aviatik (Berg) D-I, & Albatros D-III.

De Havilland Vampire Mk.35, 1/72-scale, resin. conversion kit. [Editor's note: This kit was received from a Finnish member, and the following review is reprinted from the APMA Newsletter, #2 '93. Other kits in the series are: De Havilland Vampire Mk.35 Tail Components A$5.00 (I don't see how you can complete a two-seat Vampire without both conversion kits, but, if you do, one of fuselage kits is available form the SAFCH Sales Service) and a complete GAF Pika A$14.00.]
"A new series of limited run aircraft models have recently appeared in Melbourne. Released under the label of 'Uncle Les's Bag of Bits', these resin kits are marketed exclusively by Hearn's Hobbies, 295 Flinder St., Melbourne, Victoria, Australia. Whilst not of the standard reached by overseas manufacturers, the subjects are of Australian types not available anywhere else. The casting suffer from many holes mostly in the lower surfaces. which will require much filling ans sanding. Initially the kits were conversion parts but have now been extended to complete aircraft. All the labels advise that minor *scratchbuilding is required and are for the experienced modeler only.
"De Havilland Vampire Mk.35 Conversion Kit A$12.50: Designed to use with the Heller Vampire kit, it contains one resin fuselage and one styrene canopy, plus an instruction sheet that includes a 5-view drawing of A79-636. No decals are included. The cockpit area contains the instrument panel and both ejector seats. The canopy is very thin and of acceptable clarity."

Junkers W 34, 1/72-scale, short-run, injection molded kit. MPM.
Tom Sarbaugh (SAFCH #497) sent a list of present and future kits from the MPM company in what used to be Czechoslovakia (I'm not sure what side of the border they are). Of particular interest to the modeler of the aircraft of the small air forces is a kit of the Junkers W 34 planned for the near future.

SVENSKT MILITARFLYG: Propellerepoken, Lennart Andersson. 320 pages, 17 cm by 24 cm. Hardbound. Allt om Hobby AB, Box 90133, S-120 21 Stockholm,.Sweden.

In over 30 years of collecting and reading aviation books, I find most fall into two distinct categories. (1) Books with limited text but lots of photos/drawings which can be read in one sitting. (Books in foreign languages fall into this category, because only a limited amount of the text is available to me.) (2) Books with lots of text which need weeks of 'sittings' to digest. However, books in both these categories end up on the shelf to be recalled only when a specific piece of information is needed or for the pleasure of rereading a particular section, looking over a set of photos, or studying a sequence of drawings. A third, much smaller, category exists; books that, once read, stay on the table next to your bed to be enjoyed night after night. Each time you pick it up, there is a new way to look at it: chronologically, by aircraft type, by squadron, etc. Until recently, the only book in this latter category I had was Bill Larken's 'US Naval Aircraft 1921-1941'. Now I have a second - Lennart Andersson's 'Svenskt Militarflyg: Propellerepoken'.

Long-time readers of SAFO will remember Lennart's (SAFCH #68) meticulously-researched series on Junkers Export Aircraft. All his enthusiasm and scholarship has carried over to his new book. 'Propellerepoken' describes Swedish military aviation of the propeller 'epoch' from its beginnings before WWI, to the formation of the Flygvapnet in 1926, and continuing up to the introduction of jet aircraft. The first two sections cover the Marinens Flygvasende (naval aviation) and Armeflyget (army aviation) which were formed prior to WWI and were combined to form the Flygvapnet (Royal Swedish Air Force) in 1926. The chapter on the Marinens Flygvasende covers 32 pages with 27 photos of Nieuport IV, Thulin B, Farman HF-23, Friedrichshafen FF-33E, Heinkel S-1, Savio S.13, and many other types. The chapter on the Armeflyget covers 58 pages and has 46 photos of Albatros B-II, Thulin L, Phoenix C-I & D-II, Fiat BR-I, FVM Tummelisa, and many more.

The Flygvapnet is covered in 235 pages with lots photos of Junkers Ju-86, Hawker Harts, Northrop Model 8A-1, Fokker C-V. Bristol Bulldogs, Gloster Gladiators, Fiat CR-41, Reggiane Re-2000, De Havilland Moths, Raab-Kazenstein Tigerschwalbe, Focke-Wulf FW-44 Stiegliz, Klemm Kl-35, Bucker Bu-181 Bestmann, North American T-6, Caproni Ca-313, SAAB 17, 18, 21, 22, & 23, North American P-51, Spitfires, Mosquitos, and many more. Fifty-four pages of tables list each individual aircraft, the date it entered service, the numbers it carried through the numerous changes in designation systems, and its final fate. This section is subdivided into an historical survey of Flygvapnet operations from 1926 to 1959, the organization of the wings and squadrons, a history of each wing, a history of each aerodrome, and a model-by-model discussion of each aircraft type.

This book will provide endless evenings of pleasure tracing the history (through photos and tables) of individual aircraft, a particular aircraft type, a specific unit, or whatever strikes your fancy at the time. However, I do have a couple of small quibbles: (1) The index does not list the photos so your on your own, but, maybe, that's part of the fun. (2) The drawings illustrating the various marking systems are of generic aircraft. I would much rather have had drawings of real aircraft. (3) Although the English summary is 16 pages, it is far too brief; this book is so good that the non-Swedish-speaking reader wants to know much more.

Considering the amount of ware and tear you are going to give this book, it is fortunate that the material quality is top-rate. The book is well-bound between sturdy, dirt-resistant covers; the glossy pages provide for the best possible reproduction of the photos and will resist wear as you continually thumb over the photos and tables. Lennart Andersson and Allt om Hobby are to be complimented for publishing a first-class book. Can we possibly hope for an English-language edition?

VULTEE AIRCRAFT 1932-1947, Jonathan Thompson. 132 pages, 8.5 in. by 11 in., 236 photos, 23 scale drawings. Softbound. $29.95.

In the Acknowledgements, the author (SAFCH member Johathan Thompson) describes this book as "essentially a photographic record, model by model, including modifications and unusual variations, of all the company's aircraft". The reader has no doubt of this when, on the title page, he comes nose to nose with a Brazilian Air Force Vultee floatplane spreading it wings across two pages (and this publication is in the landscape format). Each Vultee type is described in a brief but information-filled text, beautifully-reproduced photos, tables giving specifications and histories of each aircraft, side-view drawings of the various sub-types, and scale drawings of varying quality from a variety of sources.

The aircraft types covered and the relevant small-air-force content are:

Vultee V-1/V-1A: 13 pages and 23 photos including Chinese V-1AD, Spanish Republican V-1A, Spanish Nationalist V-1A, and Soviet V-1AS floatplane (3). **V-11/A-19/V-12**: 28 pages and 48 photos including Soviet V-11G (2), Brazilian V-11GB2 (5), Brazilian V-11GB2F floatplane (3), Turkish V-11GBT (3), and Chinese V-11G (3). **Vultee 48/61/P-66 Vanguard**: 18 pages 33 photos including Swedish 48C, RAF 48C, and Chinese P-66 (3). **Vultee 51/54/BT-13/15/SNV Valiant**: 35 pages and 56 photos. Although coverage of Navy, USAAF, and civilian Valiant is extensive, the only disappointments is that there is so little information on small-air-force Valiants. Although mention is made of the number of Valiants sent to Latin America and the article in SAFO #39 is listed in the Bibliography, the only photo is of "one of a few Valiants for the Chuan-kuo Kung Chuan, waiting in Calcutta in September 1945". [Editor's note: Darned if I know what the Chuan-kuo Kung Chuan is, but the national insignia consists of a white Chinese charter on a dark disc. This character is similar to that carried within a red star used on aircraft of the Communist Aviation School in Manchuria as described in a letter from Rod Thorsen and reproduced elsewhere in this issue of SAFO. Can anyone help identify the Chuan-kuo Kung Chuan?]. **Vultee 72/A-31/A-35 Vengeance**: 14 pages and 23 photos including RAF (3) and RAAF (6). This aircraft is well described in other publications and is appropriately given reduced coverage. **Vultee 84/XP-54**: 5 pages and 5 photos of the attractive twin-boom pusher experimental fighter. Also included are artist renditions and a 3-view drawing of the similar but even more attractive Model 78 proposed to the British. **Vultee 90/XA-41**: 4 pages and 4 photos. Vultee returned to the bomber (now attack) format with this aggressive-looking, but unsuccessful design. **Vultee 102/XP-81**: 5 pages and 7 photos. Vultee's last project was this very attractive mixed-power-plant fighter which was left behind by the rapid maturation of the pure-jet fighter.

The book comes to an end with appendices on "Vultee, Vultee-Stinson and Consolidated-Vultee Project Numbers", "Vultee Aircraft by Designation, Purpose and Number Built", and "Engines Installed in Vultee Aircraft." The Bibliography is usefully divided by type.

The front cover of the this book is color photo of a line-up of US Navy Vibrators in their attractive blue and yellow color scheme. This is a fitting introduction to a very attractive and informative book.

MiG-21 FISHBED IN ACTION, Don Linn & Don Spering. 62 pages, 28 cm by 21 cm. Softbound. Squadron/Signal Publications, 115 Crowley Dr., Carollton, TX 75011-5010. $7.95.

This latest release in the "In Action" series will be of great value to all SAFO readers interested in modern aircraft. This volume conforms to the successful In-Action formula of lots of well-reproduced photos, authoritative text, 3-view drawings, sketches of the detailed differences between variants, a center-spread of color side-view drawings, and color paintings on the front and back outer covers.

Approximately half the photos are of small-air-force MiGs including those in the markings of Czechoslovakia, East Germany, Romania, Yugoslavia, Hungary, Finland, Poland, Iraq, North Vietnam. Egypt, Cuba, Sudan, Germany, and Afghanistan. Among the 10 color side-view drawings are the following small-air-force subjects: Iraqi F-13, Czech F-13 '1013', German PFM '22+02', Mongolian PFM '002', Hungarian F with chevron insignia on a red disc (does anyone have documented proof of the use of this insignia?), Sri Lankan Chinese-built F-7P 'CF708', Republic of Yugoslavia bis in new national insignia, and Afghan US '578'. The cover paintings are of Indian MiG-21FL 'C992' & bis 'C2305, and Pakistani Chinese-built JJ-7 '602'.

Squadron's Fishbed In Action is an excellent book that should please all enthusiasts of the small air forces.

[Editor's note: Review copy generously provided by Nick Water (SAFCH #2) of Squadron-Signal.]

JUNKERS Ju-87D-H, Wieslaw Baczkowski. Typy Broni i Uzbrojenia (TBU) #148. 32 pages, 17 cm by 24 cm. Wydawnictwo Bellona, ul. Grzybowska, 00-950 Warszawa, Poland.

There is a quantum jump in the quality of this latest release in the well-known Polish-profile series. Besides an increase in the number of pages (from 20 to 32), the change to a high-quality, glossy paper greatly improves the reproduction of the (always excellent) color drawings and the (formerly fuzzy) photographs. The usual TBU format is maintained: Polish text, side-view drawings of all variants, drawings of details, and lots of color drawings.

Unfortunately, this volume does not contain very much on the small air forces; all the photos are of Luftwaffe a/c as are the 5-view color center-spread drawing and all but 3 (Bulgarian, Romanian, and Hungarian) of the color side-view drawings.

[Editor's note: The new publisher, Wydawnictwo Bellona, appears to be considering reprinting at least some of the TBU series. An insert in #148 lists all 147 former TBUs with "check-off" boxes in what appears to be a "survey" of potential interest.

Anyone wishing to participate in this survey can respond directly to Bellona at the address above, or, if you want the list first, send a SASE with an extra 1st Class stamp enclosed to cover my xeroxing costs (or 2 IRCs) to the SAFCH editorial office.]

LOCKHEED HERCULES PRODUCTION LIST 1954-1994, Lars Olausson. 112 pages, 14 cm by 21 cm. Softbound. Lars Olausson, Box 142, S-530 32 Satenas, Sweden. $10.00 (or equivalent) surface, $12.00 airmail.

Talk about a labor of love! SAFCH member, Lars Olausson, continues to update his production list of the Herky Bird. He has just come out with the 11th edition which lists all 2036 Hercules produced (including the 37 per year planned through 1996) and updates the histories of all these aircraft.

As usual, everything is cross referenced so you can find anything you want about any particular Hercules. For example, if your interested in the fate of the Kuwaiti aircraft, the "Operator" section tells you that the KAF used 6 machines (s/n 4350, 4412, 4949, 4951, 5953, & 4955). Then, the "Production List" tells you that 4350 crashed and 4412 was resold to LAC before the Iraqi invasion; 4949 "KAF322' was hit by ground fire at Kuwait City airport 900802, flown to Iraq, hit by bomb, center fuselage badly damaged, 9208 to be repaired?; 4951 "KAF323" evacuated to Saudi Arabia without cargo compartment floor (900802), 9104 Jeddah temporary repair, 9110 OGMA Lisbon final repair; 4953 "KAF324" evacuated to Saudi Arabia 900802; 4955 "KAF325" evacuated to Saudi Arabia 900802. Lars writes, "Several C-103B have gone to South American countries, and there are now c/n on page 96 for Colombia, Chile, Honduras, and Ecuador. However, much information is still missing, so please mention that I need to know about C-130s delivered from the USAF to Latin America."

Lars is doing the Hercules enthusiast a great service. Don't you wish that somebody had done the same for your favorite aircraft? Copies of the "Hercules Production List" can be obtained directly from Lars at the address above. Lars requests that you send cash: "No small cheques, please, as the bank charge is $9.00!"

[Editor's note: Does it ready cost this much to cash a check, or are the banks trying to stifle international trade? As another example, the other day I was charged $20 for an "wire transfer" from Holland. I don't know about you, but I feel that I'm being ripped off. Would a member familiar with banking want to explain these charges?]

McDONNELL DOUGLAS A-4Q SKYHAWK. "I would like to bring to your attention the monograph dedicated to the A-4Q Skyhawk and published by the Naval Aviation Museum (of which I'm its chief researcher and curator) to raise funds for our activities. Our idea is to publish a series of titles dedicated to aircraft of the Argentine Navy. I'm currently working on the Grumman Tracker and Panther; other titles planned for 1993 could be the Super Etendard, Sea King, and Alouette III. Future releases will include at least two pages of drawings showing colors and modifications of aircraft in Argentine service, as well as complete histories of individual aircraft no longer in service. The price of the A-4Q booklet is US$ 10.00, air mail postage included. For orders of 10 or more the cost is US$ 6.90 each including air mail postage. Payment should be by check made out to Jorge F. Nunez and drawn on a bank with a subsidiary in the US or Switzerland. Send orders the address below."

Jorge F. Nunez Padin (SAFCH #395), Gallo 1586-2°B, 1425 Capital Federal, Argentina.

McDONNELL DOUGLAS A-4Q SKYHAWK, Jorge F. Nunez Padin. Museo de la Aviacion Naval. 28 pages, 15.5 cm by 22.5 cm. Softbound. $10.00

This is the first in a series by the author, and the Museo de la Aviacion Naval, dedicated to important aircraft in the history of Argentine Naval Aviation. Future titles will, reportedly, include Grumman S-2, Grumman F9F-2 Panther, Alouettes and others.

This first release has a full-color cover showing A-4Q 3-A-302 in the final low-visibility slate-gray color scheme worn by the Skyhawks in CAN service. There are 19 black and white photos and one color photo elsewhere in the book, including three showing Skyhawks operating off the carrier "25 de Mayo", which are very interesting. The author has also included a rather rough, computer generated, side-view showing the electronics antennae packages of the A-4Q, which should be very useful to modelers. One of the more interesting photos shows 3-A-304 in a camouflage pattern similar to that worn by Fuerza Aerea Argentina A-4Ps, although this photo is, unfortunately, in black and white. The final pages, following a well-written history of the aircraft in Argentine Naval service, are devoted to operations during the Falklands/Malvinas War, with an aircraft-by-aircraft record of the missions flown.

Although written in Spanish throughout, this tidy booklet will quickly become a collectors item. The author is to be congratulated for his efforts in bringing this story to the world in a format that is accurate, detailed, and tailored to the expectations of airplane enthusiasts everywhere.

Dan Hagedorn (SAFCH #394), PO Box 682, Centreville, VA 22020-0682 USA.

10 de Agosto - 75 Anniversario de la Creacion de la Fuerza Aerea Argentina. "This is a 10 in. by 10 in., hardbound, approximately 150 page book published to celebrate the 75th anniversary of the FAA. Filled almost entirely with color photos, primarily of recent vintage, this could have been a very valuable book. However, these photos are frequently marred by a rather heavy-handed attempt to cloak the serial numbers of the aircraft. For instance, for some obscure reason, a full-page, color, in-flight photo of an EMB-312 Tucanos has had the Brazilian delivery registration altered from PT-ZUK to something resembling PT-XUK; the 'Z' being crudely overmarked with something resembling a letter from the Greek alphabet! Other photos are left alone, including one showing the unique PL-4 monoplane built in the shops of the ENET No. 1 by the students of the Ciclo Superior at El Palomar in 1986. Then again, one of the Boeing 707s operated by the FAA, TC-91, in an otherwise beautiful, full-page, color shot, is left with a serial looking like 'IO-81'! There are interesting photos of FAA installations and operations throughout, and it does give a fairly good overview of the service (and they chose to use attractive FAA service women to 'man' the equipment in some poses). One of the crudest 'counter-intelligence' attempts is a nice photo of the nose of an FAA Fokker F-27 shown marked as 'T-4414' rather than the correct T-44. Two nice views of the single-seat Pucara derivative, the IA-66, which was actually marked AX-06 have been altered to appear as 'IAX-88'. A nice view of the nose of a DHC-6 Twin Otter is marred by the serial being altered to read 'I-88' and the operating unit shown as 'IXI Brigada Aerea". There are several pages of photos taken in the Falklands while the FAA was entrenched there that have not been published before, but these do not reveal much. This book does give you a feel for the FAA, but the service has performed a dis-service to history by its rather juvenile attempt to misinform the reader.

"The review copy was given to me by Carlos Ay."

Dan Hagedorn (SAFCH #394), PO Box 682, Centreville, VA 22020-0682 USA.

"I have been working on a book about the **Sopwith Baby** in Norwegian service for the NFF (Norwegian Aviation Historical Society). The finished product is a 40-page book in A4 size. It includes reprints of original factory drawings as well as a large number of photos and a color cover. I have also made a short English summary. I have a few spare copies for sale, but I will have to charge $15.00 for one sent to the USA because the cost of printing and mailing is very high in Norway. Payment should be made in currency since the cost of cashing an overseas cheque is impressive. SAFCH members who want to get one of these books should write to me at the address below."

Knut Erik Hagen (SAFCH #903), Stamhusveien 67, N-1181 Oslo, Norway.

ILUSTROVANA HISTORIE LETECTIVI, Avia/Letov C-2 (Arado Ar 96), Aero L-29 Delfin, & De Havilland Tiger Moth, Zdenek Hurt, Pavel Kucera, & Oliver Chalas. 164 pages, 21 cm by 30 cm. Softbound. Nase Vojsko, Edice Triada.

The Triada series keeps getting better and better. The three aircraft covered in this volume are: (1) De Havilland Tiger Moth. The 37 pages of text (including a short English summary) is compliments with 25 b&w photos with English captions, 4 pages of 1/48-scale drawings, several pages of sketches, and 12 pages of gorgeous color drawings including aircraft flown by Czech student pilots in England, and Tiger Moths in the colors of Norway, New Zealand, Australia, South Rhodesia, US Army Air Force, Sweden, and France.

(2) Avia/Letov C-2. This section is more to point for small-air-force enthusiasts. 33 pages including 28 photos, 5 pages of 1/48-scale drawings including a 3-view of the Ar-396 (see review of Huma kit in this issue of SAFO), the usual English summary and captions, 8 pages of color drawings including Ar-96 in the markings of Solvakia, Hungary (two different war-time national insignia, one in mixed Hungarian/Luftwaffe insignia, one in the post-war red-star on white disc encircled in red/white/green rings, and one in the post-war insignia so frequently mistaken for Lebanese markings), and 10 in Czechoslovakian markings; the Ar-396 is represented by a Luftwaffe and a Czech aircraft, and a French SIPA 111A.

(3) The final section, written by SAFCH member Oliver Chalas, covers the Aero L-29 Delfin. 38 pages of text including 21 b&w photos and several pages of sketches of details, 7 color photos including Indonesian, Ugandan, & Hungarian aircraft, 4 pages of 1/72-scale drawings, 9 pages of color drawings including Czechoslovakia (11), USSR, Bulgaria, North Vietnam, Indonesia, Ghana, Iraq, Nigeria, Uganda (2 schemes), East Germany, Hungary (2 schemes), UAR, and Egypt (two schemes including one with desert camouflage top and red undersides.)

I can not praise this book to highly. The modeler with a large collection of unbuilt KP kits squirreled away will have a a difficult time deciding which C-2 and L-29 to model first.

SQUADRONS OF THE ISRAELI AIR FORCE 1948 - 1992

PART III : Squadrons 113 to 117

John Hayles

Since Part II was written, further research has revealed that 106 sqn was actually disbanded in about 1952, probably handing over most of its duties to the rapidly expanding EL AL. In the summer of 1982, 106 sqn was reformed to fly the F-15C/D Eagle. When a new VIP Transport Squadron was formed in 1962, the unit was allocated a new identity. This identity has not, so far, been revealed and is therefore allocated the letter 'G' for future reference. Hence, the details presented under "106 sqn" from 1962 onwards actually relate to 'G' sqn - including the Naval Flight and the Transport Command insignia given in Figure 21.

113 Squadron ("Wasp Squadron")

Role : Fighter-Bomber, later Attack Helicopter

113 Squadron was first formed in October 1955, to become the first unit to operate the MD450B Ouragan. Interestingly, the aircraft were withdrawn from Armee de l'Air fighter wings EC12 and EC4. The insignia of 2e Escadrille of EC1/12 Cambresi, (a wasp on a red lightning bolt), bearing a remarkable resemblance to the tail badge subsequently adopted by 113 sqn.The Ouragans were initially operated in natural metal finish, but a camouflage finish was applied after the arrival of the first Mystere IVAs in April 1956.

The unit achieved its first aerial victory on 12 April 1956, when one of two Egyptian Vampires patrolling the Negev area was shot down. In the opening rounds of the Suez campaign, from 29 October 1956, Ouragans were extremely effective in attacking Egyptian ground positions in the Sinai. The type claiming a major proportion of the armoured vehicles destroyed, together with a half share of the destroyer Ibrahim el-Awal (on 31 October). Four more Vampires were also shot down on 30 October, and a MiG-15 fell victim later. In total, just two Ouragans were lost to ground fire during the Suez operation - and none to air action.

113 Squadron and 115 squadron were still operating the type in June 1967 when the Six Day War broke out. Ouragans and Mystere IVAs being directed against Egyptian airfields in the Sinai on 5 June, followed by raids on the Syrian And Jordanian fronts. Up to eight Ouragans were lost in the conflict.

Shortly after the war, the Ouragan units were relegated to second-line and training tasks. 113 squadron continued in this role until early 1973, when the unit re-equipped with locally built IAI Nesher. Operated exclusively in the interception and air superiority role, the Nesher proved its worth in the Yom Kippur War later in the year. 113 sqn claimed 25 kills in air combat for no loss.

In 1976 the squadron commenced conversion to the Kfir C-1, becoming the second unit to operate the type, and at the same time reverting to its previous fighter-bomber role. The units' operational capability was demonstrated when four aircraft attacked PLO positions at Tel Aziyah, Lebanon, on 9 November 1977 - the first such raid by any Kfir unit. Just over a fortnight later, on November 21, four aircraft of the same unit escorted the Boeing 707 of Egyptian President Anwar Sadat back home after his historic visit to Israel.

In 1979 the more capable Kfir C-2 model replaced the earlier version. The type was used effectively during the invasion of Lebanon , June-August 1982, including attacks on Syrian GCI And SAM radars located in the Lebanon valley, and on PLO positions in the siege of Beirut.

The squadron was disbanded in 1987, as the Kfir was gradually phased out of service due to Israeli defence budget cuts. A reformed 113 squadron took delivery of the first AH-64A Apache attack helicopter in September 1990, and is currently the sole operator of the type.

Aircraft used by 113 sqn include:

Type	Qty	Service	Bases	Badge	Example Serials
MD450B Ouragan	24	6 Oct 55 - Jan 73	Hatzor	31	29,42,54,64
IAI Nesher	15	Jan 73 - 1976	Hatzor	31,32	
IAI Kfir C-1	24	1976 - 1979	"	31,32	729
IAI Kfir C-2/TC-2	24/4	1979-1987	"	31,32	864
AH-64A	18	12 Sep 90 - Present	"Negev Base"	31	801,806,845

115 Squadron ("Dragons Squadron")

Role: Photo-Reconnaissance, later Attack

115 Squadron was formed in the summer of 1956, as a dedicated photo-reconnaissance unit. Its initial equipment comprised a few ex-110 sqn Mosquito PR16 bombers, which had been converted back to the photo-recce role, together with a similar number of Meteor T.7s converted for the same role.

Virtually nothing appears to have been published regarding the activities of this recce unit in the Suez campaign. In 1960 the unit was disbanded, the Mosquitos finally being retired and the Meteors reallocated to other units.

In November 1964, the squadron was reformed to operate the Ouragan, and thereby adopted its present attack role. The Ouragans having been withdrawn from Armee de l'Air service with the Ecole de Chasse. 115 sqn was the third IDF/AF unit to operate the type. Ouragan operational use is described under the entries for 109 and 113 squadrons.

In 1969 the unit re-equipped with two dozen ex-USN A-4E Skyhawks, as the first unit to fly this particular variant. Constant updating and modification have blurred the distinctions between IDF/AF Skyhawk subtypes, but 115 sqn appears to have also operated the A-4H version, and some two seater operational trainer variants. By the end of 1972 the squadron had converted to the much improved A-4N variant, specifically designed for Israeli requirements. The A-4N is at present still in service with 115 squadron.

Aircraft used by 115 sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
Mosquito PR.16	3	Mid 1956 - 1960	Ekron		
Meteor T.7	3	Mid 1956 - 1960	Ekron		
Ouragan	24	30 Nov 64 - 1969	Ekron?		
A-4E/A-4H	25	1969 - End 1972	Tel Nof (Ekron)	33,35	
TA-4E/TA-4H	5	1970 - Present?	"	33,35	
A-4N	30	End 1972 - Present	"	34,35	318,322,344,354, 371,401,405,415

116 Squadron ("Wire Cutters Squadron")

Role: Fighter-Bomber

The famed wire-cutters squadron was formed in early 1956, when 101 and 102 sqns relinquished their P-51D Mustangs in favour of the Mystere IVA and Ouragan respectively. The newly transferred aircraft were given a coat of camouflage paint, in contrast to their previous natural metal finish. Some ex-101 sqn aircraft retained the red/white rudder stripes of their original operator.

The nickname was earned during the opening hours of the Suez Campaign, when squadron aircraft were tasked with deliberately flying through Egyptian telegraph wire in the Sinai. This action significantly hampered Egyptian communications during the vital early stages of the conflict, although some aircraft were lost due to wing and propeller damage.

Although obsolescent in the face of Egyptian MiGs and Meteors, the Mustang fought with distinction throughout the campaign - flying intensive ground attack operations in direct support of the ground forces. A number of losses resulted when ground fire punctured the vulnerable engine cooling system, and caused a complete loss of coolant. Of the 29 aircraft available, a total of nine Mustangs were lost in the short war - more than 30 per cent.

Shortly after the end of the war, the unit began to re-equip with the Mystere IVA, and passed all its P-51Ds over to 105 sqn. It is probable that the aircraft received were (or included) ex-EC2 examples; used by the Armee de l'Air from Israeli bases throughout the Suez Campaign. 116 sqn was the second operator of the type.

Initially flown in the fighter-bomber role, from 1962 the type was relegated to the ground-attack role. Mystere IVA operations in the Six Day War are described under 109 sqn. Following the re-equipment of 109 sqn in 1968, 116 sqn became the sole Mystere IVA unit.

In 1970, the squadron began to receive ex-USN A-4E Skyhawks, allowing it to finally retire its Mystere IVAs in February 1971. A-4 use in the Yom Kippur War is described elsewhere. By 1975, the unit had converted to the A-4N variant. The squadron is thought to have disbanded in about 1981.

Aircraft used by 116 sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
P-51D	20	Apr 1956 - 1957	Ekron	36	038,39,54
Mystere IVA	30	1957 - Feb 1971	Ekron	37	09
A-4E	20	Feb 1971 - 1975	Tel Nof (Ekron)	35	218,215,209
A-4N	24	1975 - 1981	"	38	322,323,392

117 Squadron ("First Jet Squadron")

Role:Fighter-Reconnaissance/Interceptor Fighter

117 Squadron was formed on the 3 June 1953 (some sources say 7 June) at Ramat-David air base, specifically to operate the Gloster Meteor. The first two examples of the T.7 variant arrived two weeks later, making 117 sqn the first jet operator in the IDF/AF. The first two Meteor F.8 fighters arrived in August. The initial aircrew complement comprised a handful of experienced Mustang pilots transferred from 101 sqn.

More aircraft arrived in early 1955, in the shape of seven ex-RAF Meteor FR.9s. In fact only two of the seven were used for photo-reconnaissance, the other five were virtually to F.8 standard and used for air superiority missions.

On 1 September 1955, a pair of Meteors from the squadron detachment at Hatzor shot down two Egyptian Vampires which had been strafing a Kibbutz in the Negev. These two kills being the first since the end of War of Independence 1948/49. On 29 October 1956, the opening day of the Suez campaign, Meteor F.8/FR.9s were used to escort the C-47s carrying paratroops deep into the Sinai peninsula. The next day and subsequently, the Meteors were used primarily on ground attack missions - being particularly effective against Egyptian armoured vehicles. A total 77 sorties were flown, including a few photo-recce flights, for no loss.

In April 1957, the squadron became an OTU as part of the Central Flight School. To this end, four more Belgian "T.8"s were acquired. So-called because of the F.8 style of tail unit fitted on these T.7 airframes. On 11 February 1962 the squadron was officially disbanded. The Meteor T.7s were transferred to 119 sqn, and the F.8/FR.9s transferred to another unit.

Two months later, the squadron was reformed to operate the Mirage IIICJ. 117 sqn was the first unit to operate this mach 2 fighter. It is probable that this unit was also the recipient of the four Mirage IIICJ(R) reconnaissance versions supplied from France.

The first day of the Six Day War saw Mirages of 117 sqn leading the first wave attacks on Egyptian air bases at Beni-Suef and Faid. Raids on Syrian and Jordanian positions followed. The Mirages returned to the air superiority mission from the second day, and scored a total of 12 victories in air combat for the loss of three aircraft, (including two to AAA fire).

The War Of Attrition, which followed, saw a large number of increasingly bitter dogfights with Egyptian, Syrian and Soviet-piloted fighters. In all, the conflict comprised some 97 air combats during which the Israelis claimed 101 enemy aircraft shot down (mostly by Mirages), for a loss of only five of their own.

From May 1971, IAI Neshers began to supplement the surviving Mirages. The Yom Kippur War of 1973 again saw intense air activity, with the squadron flying interception and fighter escort missions over the Syrian front. 117 sqn was credited with an amazing 55 kills for only one loss.

After the Yom Kippur War, all the surviving Mirages were put through an update programme. This work included: substitution of the Atar 09B engine with the more powerful 09C, re-skinning of the wings, revised weapons pylons and improved avionics. With the introduction of the Kfir C-1 in 1975 and F-15 Eagle in 1976, the Mirages and Neshers were relegated to a secondary role in Israeli air defence.

In July 1980 the squadron began to re-equip with the F-16A, once again being the first unit to operate the type. Just under a year later, squadron pilots took part in the raid on the Iraqi Osirak nuclear reactor, with considerable success. On 7 June 1981, eight F-16As (with crews drawn equally from 101 and 117 sqns), flew a distance of some 625 miles, without air refuelling, on a daring mission to attack the Iraqi 'Osirak' nuclear reactor near Baghdad. Despite being undertaken without the benefit of laser guided bombs, the attack was completed successfully and all aircraft returned safely. Although the resulting setback to the ambitious Iraqi nuclear weapons programme was only temporary, the delay thus incurred was to acquire far greater significance almost ten years later, when United Nations forces faced Iraqi forces on the Kuwaiti border.

The dual-role fighter and attack capability of the F-16 has been widely exploited by the IDF/AF. The type achieved its first kills, against a pair of Syrian Mi-8 helicopters, in April 1981; and

shot down its first enemy fighter, a Syrian MiG-21, on 14 July 1981. Both kills taking place over Lebanon.

On 4 June 1982, F-16s took part in a massed attack on a PLO ammunition store in Beirut. Throughout the invasion of Lebanon, June-August 1982, F-16s and F-15s flew fighter escort missions and engaged in extensive dogfights with Syrian MiG-21s and MiG-23s. The IDF/AF subsequently claimed to have destroyed some 80 aircraft, for the loss of thirteen aircraft of their own - including one F-16.

During 1987 the units F-16A/Bs were replaced by the considerably more capable F-16C/D variant, probably passing its older aircraft to another unit in the process.

Aircraft used by 117 sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
Meteor T.7	4	17 Jun 53 - 11 Feb 62	Ramat-David & Hatzor		13,15,17,2163
Meteor F.8	11	21 Aug 53 - 11 Feb 62	"	39	01,04,05,09, 10,11,106, 2176
Meteor FR.9	7	Early 1955 - 11 Feb 62	"		31,33,37,212
Meteor "T.8"	4	Early Dec 57 - 11 Feb 62	"		21,23
Mirage IIICJ	20	April 62 - 1980	Ramat-David	40	725
Mirage IIICJ(R)	4	1962 - 1980	"	40	
Mirage IIIBJ	2	April 62 - 1980	"	40	287
Nesher	6	May 71 - 1980	"	40?	
F-16A	16	2 July 80 - 1987	"	40	111,112,138
F-16B	2	Late 80 - 1987	"	40	001
F-16C	17	1987 - Present	"	40,41	307,315,344
F-16D	8	1987 - Present	"	40,41	077

'SPS' Squadron ("Special Purpose Squadron"?)

Role: Helicopter Assault/Heavy Transport

SPS was initially formed in April 1966, specifically to operate the SA321 Super Frelon helicopter. Initial deliveries were of the amphibious SA321Ka variant, featuring large stabilising floats above the main wheels, and an external rescue winch.

Only four of the type had been delivered by the time of the Six Day War. During which, the Super Frelons participated in the assault on Sharm El Sheikh and also the capture of the Golan Heights. Despite a French arms embargo following the war, the last SA321Ka plus a further seven Super Frelons were delivered. These latter examples were of the non-amphibious SA321Kb variant, without the floats or rescue winch.

The year 1968 saw the type put to further use. On the evening of 31 October, two Super Frelons were used to fly a force of paratroopers to an Egyptian hydro-electric station and dam on the Upper Nile river and destroy both. On 28 December, the same year, four Super Frelons safely transported a commando force to Beirut Airport, where thirteen Arab airliners were destroyed in retaliation for a PLO attack.

In the Autumn of 1969, SPS began to operate the first of the Sikorsky S-65C-3 heavy lift helicopters then being delivered. The S-65C-3 is effectively identical to the CH-53D used by the US Marines.

Shortly after their introduction into service, the S-65s was involved in an audacious commando raid into Egyptian territory. On the night of 26/27 December 1969, two S-65s were used to airlift a complete Soviet P-12 'Bar Lock' air defence radar from a position on the Suez coast at Ras Ghareb. Super Frelons provided the troop transport for the mission.

Only about a dozen S-65s had been delivered by the time of the Yom Kippur War. Despite this, a number of heli-borne special operations were performed - including the landing of two 105mm howitzers on Jabel Attaka, a mountain just west of Suez city. The guns shelled the Cairo-Suez road for almost an hour before evacuation by a pair of S-65s. The Super Frelons and S-65s also flew extensively in the casualty evacuation role - the S-65s alone transporting some 2000 wounded soldiers during the war. On 9 October 1973, a lone S-65, loaded with wounded, confronted four Egyptian Su-7s and four MiG-21s while flying over the Sinai. Several minutes of desperate manoeuvring later, the helicopter escaped virtually unscathed.

During 1974-75, the surviving Super Frelons were re-engined with the more reliable American T58-GE-16 turboshaft, an improvement which was not entirely successful.

Both types performed a typical variety of roles in the invasion of Lebanon in 1982: rescuing of downed aircrews, casualty evacuation and troop transport.

With its relatively quiet and roomy cabin, and low vibration levels, the Super Frelon has proved ideal for VIP transport.

Surviving IDF/AF S-65s are currently being rotated through an update programme known as Ya'sur 2000. The improvements include a completely new electrical system and avionics suite, and the substitution of unreliable mechanical components with modern low maintenance items where possible.

The aircraft used by 'SPS' include:-

Type	Qty	Service	Base	Badge	Example Serials
SA321Ka	5	20 Apr 66 - Present?	?	44	09,408
SA321Kb	7	Late 1967 - Present?	?	44	08,010,102,120, 121
S-65C-3	16	17 Oct 69 - Present	?	46 (later 45)	960,961,247

118 Squadron (Nickname Unknown)

Role: Assault Helicopter/Transport

Immediately following the end of the Yom Kippur War, a number of US Marine Corps CH-53As were supplied by the US as emergency aid. These aircraft are distinguished by the lack of in-flight refuelling probe. Accordingly, a second S-65 squadron was formed in late 1973, with the delivery of some additional S-65C-3s. For details of S-65 operations see 'SPS' sqn.

Aircraft used by 118 sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
S-65C-3	2	Late 73 - Present	?	47	666
CH-53A	10	Oct 1973 - Present	?	47	426

Note: This unit is also thought to have flown another type previously.

'H' Squadron

Role: Assault Helicopter/Transport

In 1981, a pair of S-65Oe (S-65C-2) helicopters were acquired from Austria, and subsequently upgraded to IDF/AF standard. A third S-65 squadron was formed during the 1980's, possibly coinciding with the arrival of these examples. Further deliveries brought the eventual total for the C-3 model to some 28 examples. For details of S-65 operations see 'SPS' sqn.

Aircraft used by 'H' sqn include:-

Type	QTY	Service	Base	Badge	Example Serials
S-65Oe	2	1981 - Present	?	48	139
S-65C-3	10	1980's - Present	?	48	253

'I' Squadron ("Flying Tiger Squadron")

Role: Attack

This long established unit is well known within Israel as the IDF/AF's premier attack squadron - although precise historical details are very hard to obtain. The Flying Tigers have been tentatively identified as 102 sqn.

The squadrons initial equipment comprised about half of the batch of twenty-five ex-Swedish Air Force P-51D Mustangs delivered in 1951. Several more P-51Ds were obtained from Italy in 1955. The unit disbanded before the Sinai conflict of October 1956.

The unit reformed on the Ouragan, with 113 sqn at Hatzor. Several of their aircraft carried the famous "Tiger Jaws" nose marking. By the time of the Six Day War, the unit had been run down, to make way for re-equipment with the A-4H Skyhawk the following year. The unit is also thought to have received some A-4E variants.

By 1975 the Flying Tiger squadron had converted to the A-4N variant, a type which it still operates. Details of IDF/AF use of the Skyhawk are given elsewhere.

While earlier squadron aircraft carried a blue and white horizontally striped rudder, the latest examples appear with a plain black rudder.

Aircraft used by 'I' sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
P-51D	?	1951 - 1956	Hatzor?		
Ouragan	22	1957 - 1967	Hatzor		
A-4H/TA-4H	24/1	1968 - 1975	Hatzor	49	232,272
A-4E	Some	1970's - 1975	Hatzor		608
A-4N	30	1975 - Present	Hatzor	50,51	311,313,419

'J' Squadron ("Falcon Squadron")

Role: Interceptor Fighter

In order to retain operational capability during the squadron re-equipment process, it is standard practice for IDF/AF units to split into two parts. One part being manned by serving pilots converting to the new type, while the other part continues as before, manned by reservist pilots. When operational capability is achieved on the new type, the reservist part is usually disbanded.

In 1980 all the surviving Mirages and Neshers were gathered into a 'shadow' squadron, administered by 117 sqn, while the latter converted to the F-16. Unusually however, the shadow squadron soon became a fully fledged independent unit, nicknamed the Falcon Squadron. During 1982, the Falcon squadron also converted to the F-16A/B, and still operates the type.

Aircraft used by 'J' sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
Mirage IIICJ	?	1980 - 1982	?	42,43	111,163,177
Mirage IIIBJ	?	1980 - 1982	?	42,43	
Nesher	?	1980 - 1982	?	42,43	528
F-16A/B	22/2	1982 - Present	?	42	

Part IV of this series will cover most of the remaining front-line combat units.

Additional References

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26. Air Forces Monthly Nov 1990
27. Air Britain Digest Aug-Sept 1988
28. Air Forces Monthly June 1992
29. Air Forces Monthly April 1992
30. Born In Battle No.2 : Israel's Air Force
31. Take-Off issue 61

John Hayles (SAFCH #463), 14 Meadow Garth, Beverley High Road, Hull, N Humberside, HU6 7YJ, England.

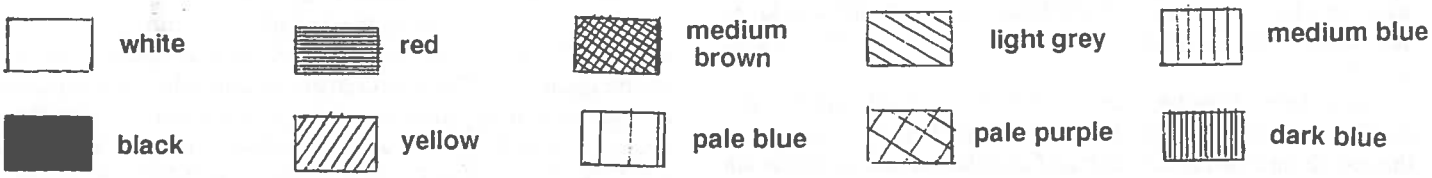




Figure 31
113 Sqn
(tail fin)

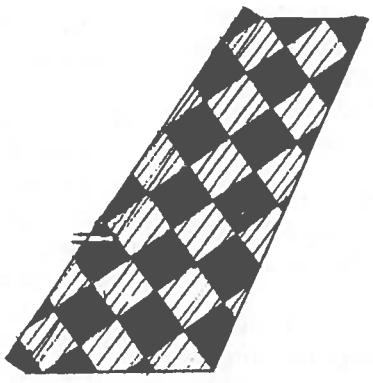


Figure 32
113 Sqn
(rudder)

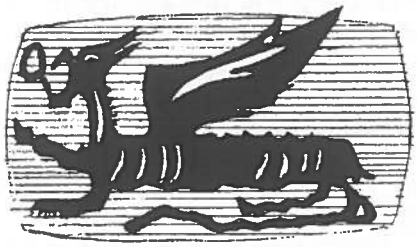


Figure 33
115 Sqn
(tail fin)

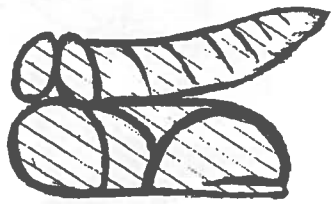


Figure 34
1115 Sqn
(tail fin)

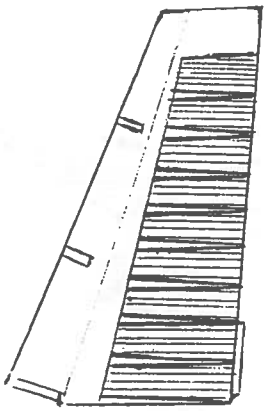


Figure 35
115 Sqn
(rudder)

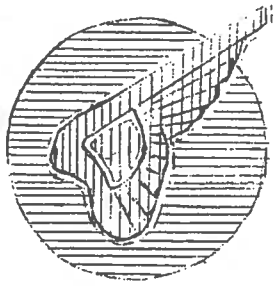


Figure 36
116 Sqn
(tail fin)



Figure 37
116 Sqn
(tail fin)

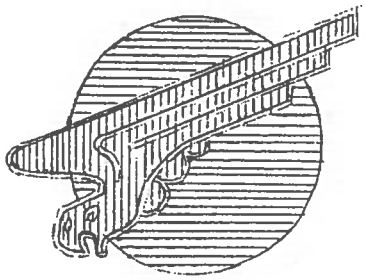


Figure 38
116 Sqn
(tail fin)

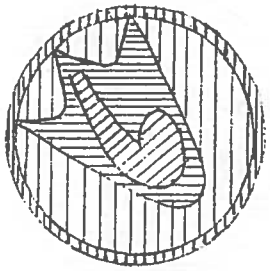


Figure 39
117 Sqn
(tail fin)

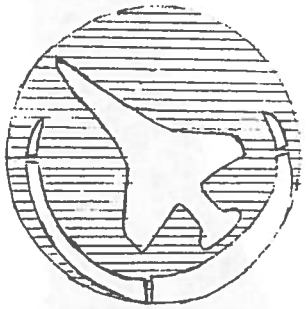


Figure 40
117 Sqn
(tail fin)

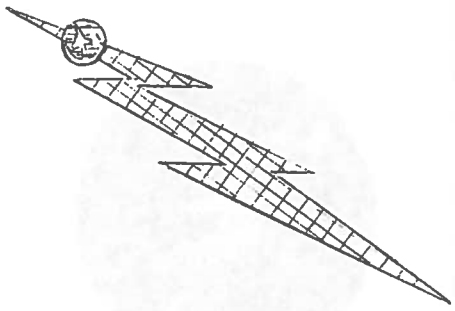


Figure 41
117 Sqn
(tail fin)

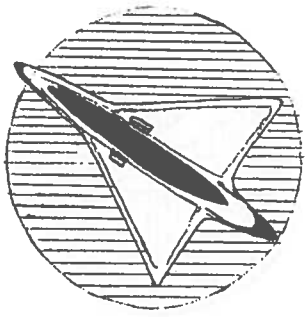


Figure 42
'J' Sqn
(tail fin)

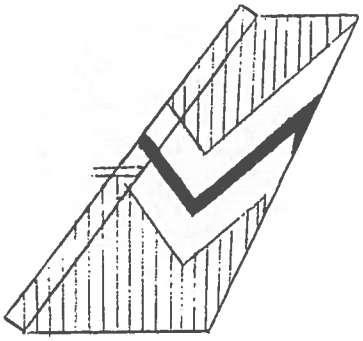


Figure 43
'J' Sqn
(rudder)

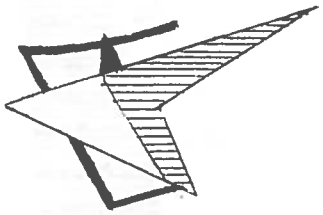


Figure 44
SPS Sqn
(tail fin)

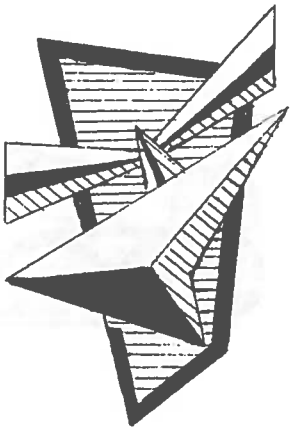


Figure 45
SPS Sqn
(under cockpit)

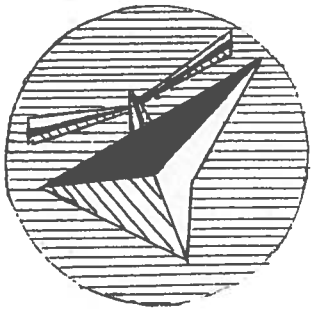


Figure 46
SPS Sqn
(rotor pylon)



Figure 47
118 Sqn
(under cockpit)

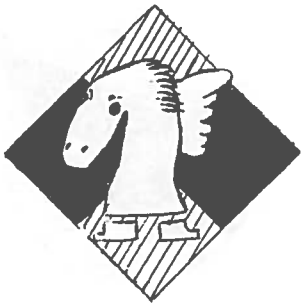


Figure 48
'H' Sqn
(under cockpit)

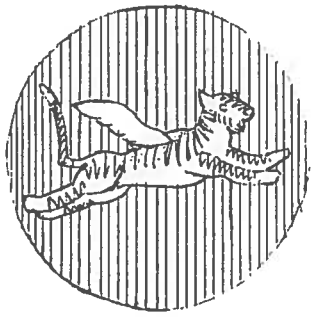


Figure 49
'I' Sqn
(tail fin)



Figure 50
'I' Sqn
(tail fin)

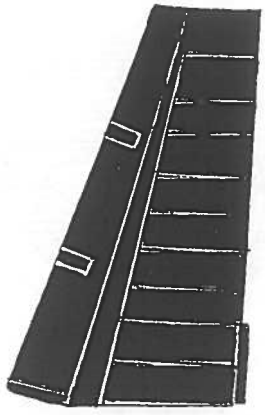


Figure 51
'I' Sqn
(rudder)



a



b

c



d





e



f

g



h

